

Catalog

2025-2026



College of DuPage
425 Fawell Blvd.
Glen Ellyn, IL 60137-6599
(630) 942-2800
cod.edu

For updated information:
catalog.cod.edu

ABOUT THE CATALOG

The *College Catalog* is published for informational purposes and provides an overview of educational programs, services and related requirements at College of DuPage. It is particularly helpful for the academic planning process and individual divisions and offices should be consulted for further information.

The information in the *Catalog* is not an irrevocable contract between the student and the College. The Board of Trustees of College of DuPage reserves the right to change, at any time without notice, the curricula, including course structure and content, graduation requirements, policies and procedures, fees and other charges, and any other matters as may be within its control, notwithstanding any information set forth in this *Catalog*. For the most current version of the *Catalog*, go to catalog.cod.edu.

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OVERVIEW

Welcome to College of DuPage – Our Core Statements

Institutional Philosophy

- College of DuPage believes in the power of teaching and learning. We endorse the right of each person to accessible and affordable opportunities to learn and affirm the innate value of the pursuit of knowledge and its application to life. Our primary commitment is to facilitate and support student success in learning.
- College of DuPage is committed to excellence. We seek quality in all that we do. To ensure quality, we are committed to continual assessment and self-evaluation.
- College of DuPage values diversity. We seek to reflect and meet the educational needs of the residents of our large, multicultural district. We recognize the importance of embracing individual differences and cultures and value the contributions made to the College by people of all ethnic and cultural backgrounds. We affirm our role as a catalyst for promoting dialogue and tolerance on issues supporting the common good.
- College of DuPage promotes participation in planning and decision making. We support participatory governance and the involvement of the College community in the development of a shared vision. We believe that all students, staff and residents can make meaningful contributions within a respectful environment that encourages meaningful discourse. We strive to build an organizational climate in which freedom of expression is defended and civility is affirmed.
- College of DuPage will be a benefit to students and the community. The needs of our students and community are central to all we do.

Mission

The mission of College of DuPage is to educate, enrich, and empower our communities for success.

Vision

College of DuPage will be the primary college district residents choose for high quality education.

Values

Integrity

We expect the highest standard of moral character and ethical behavior.

Honesty

We expect truthfulness and trustworthiness.

Respect

We expect courtesy and dignity in all interpersonal interactions.

Responsibility

We expect fulfillment of obligations and accountability.

Equity

We strive to remove barriers to empower all to achieve their goals.

College DuPage History

On Sept. 25, 1967, College of DuPage opened under the leadership of President Rodney K. Berg and Board of Trustees Chairman George L. Seaton. Classes were held in office trailers and at leased suburban sites throughout the newly formed Community College District 502. Driving

from class to class, the students, faculty and staff of this “campus-less” community college became affectionately known as road runners, hence the school’s nickname, “Chaparrals.”

College of DuPage’s origins can be traced to two signature events. First was the Illinois General Assembly adoption of the Public Community College Act of 1965. Second was the approval by DuPage high school district voters of a 1965 referendum. The residents’ foresight created a new community college to serve the dynamically growing and prospering DuPage area.

In 1968, a 273-acre Glen Ellyn campus site was acquired, and a year later, three interim buildings were constructed west of Lambert Road. The first permanent building, today’s Berg Instructional Center, opened in 1973. Four years later, the top floor of the BIC was completed. The year 1979 marked the appointment of Harold D. McAninch as College of DuPage’s second president, and in 1983 the Student Resource Center (SRC) and Physical Education and Community Recreation Center opened.

Over the next decade, the McAninch Arts Center (1986) and Seaton Computing Center (1990) opened on campus, while new Naperville and Westmont centers (1991) offered an even greater regional presence.

Michael T. Murphy became College of DuPage’s third president in 1994. Under President Murphy, College of DuPage became America’s largest single-campus community college, a distinction held through 2003. Today, College of DuPage is the second largest provider of higher education in Illinois after the University of Illinois at Urbana-Champaign.

Capping the 2002 academic year, voters approved a \$183-million bond issue that provided funds for the renovation and rebuilding of the Glen Ellyn campus and several off-campus locations.

The arrival of the College’s fourth president, Dr. Sunil Chand, and the opening of the College’s expanded Bloomingdale Center highlighted 2003. Throughout 2004 and 2005, President Chand launched major initiatives for the College’s academic accreditation through the AQIP quality improvement process, including the curriculum conversion from quarters to semesters that officially began with the fall 2005 semester.

College of DuPage opened its Carol Stream Community Education Center in 2004. In 2007, the Early Childhood Center, now the Institutional Resource Center (IRC) was completed, along with the construction of efficient new campus roadways and revamped parking lots. The following year, College of DuPage received a maximum seven-year reaccreditation through the North Central Association of Colleges and Schools Commission on Institutions of Higher Education.

Dr. Robert L. Breuder took over for Interim President Harold D. McAninch in January 2009, and that summer both the Health and Science Center and Technical Education Center opened on the Glen Ellyn campus. Construction and other physical improvements, including landscaping and signage, continued, and further improvements were supported in November 2010 when District 502 voters approved a \$168 million capital referendum initiative.

Funds from the 2002 referendum were used for construction of the Homeland Security Education Center, the Student Services Center and the Culinary & Hospitality Center, as well as a complete renovation of the Berg Instructional Center. The 2010 referendum also supported construction of the Campus Maintenance Center and the Homeland Security Training Center as well as renovations of the Student Resource Center, the Seaton

Computing Center, the McAninch Arts Center, and the Physical Education Center.

In July 2016, the Board of Trustees appointed as president Dr. Ann Rondeau, a three-star admiral (retired) in the U.S. Navy—the second woman to achieve such a rank—and past president of the National Defense University. Under Dr. Rondeau's leadership, Standard & Poor's upgraded the College's AA bond rating to AA+ and affirmed its rating outlook of "stable" on the College's outstanding general bonds. In addition, the College entered into a new intergovernmental agreement. This renewed collaboration helped foster the inaugural Innovation DuPage, a cooperative venture and nonprofit corporation that promotes regional business growth and job creation.

Dr. Brian W. Caputo became the College's seventh president in 2019. Seeing the need to re-evaluate space and expand classrooms within the BIC, Dr. Caputo spearheaded the retrofit of the Early Childhood Center to become the Institutional Resource Center (IRC), which is the home to two departments and two divisions. Dr. Caputo also led the College as it continued operations during the COVID-19 pandemic, converting classroom delivery from in-person to online and maintaining a strong fiscal profile during a time of uncertainty.

Dr. Muddassir Siddiqi became the College's eighth president, taking over for Interim President Dr. Christine Hammond in 2025.

The community college district served by College of DuPage has grown significantly over the years. Originally formed from 10 high school districts, District 502 has become the most populous region in Illinois, outside of Chicago. More than 1 million residents from 51 communities comprise today's District 502, with boundaries encompassing parts of Cook and Will counties, as well as the majority of DuPage County.

College of DuPage's operating revenue is derived primarily from local taxes, tuition and fees, and state allocations. Special grants from state and federal sources may be acquired, and gifts and grants from foundations and private sources are accepted through the College of DuPage Foundation. College of DuPage is recognized by the Illinois Community College Board (ICCB) and governed by a locally elected seven-member Board of Trustees and one elected, non-voting student representative.

Facilities

Located 25 miles west of downtown Chicago at 425 Fawell Blvd., COD's Glen Ellyn campus includes 13 buildings: the Student Resource Center (SRC), Student Services Center (SSC), Seaton Computing Center (SCC), Berg Instructional Center (BIC), Culinary & Hospitality Center (CHC), McAninch Arts Center (MAC), Physical Education Center (PEC), Health and Science Center (HSC), Homeland Security Education Center (HEC), Homeland Security Training Center (HTC), Technical Education Center (TEC), Institutional Resource Center (IRC), and the Campus Maintenance Center (CMC).

Board of Trustees

The Board of Trustees is charged with establishing policy for the financing, governance, operation and administration of College of DuPage. Seven voting members are elected from the district at large and a nonvoting student trustee is elected by students during spring semester to serve a one-year term.

Regular Board of Trustees meetings are normally scheduled for the third Thursday of each month. The public is invited to attend these

meetings. Meeting information, as well as archived minutes and videos, are available on the College website at cod.edu/board (<https://cod.edu/board/>).

Christine M. Fenne
Board Chair, Wheaton

Florence Appel
Board Vice Chair, Lombard

Andrew Manno
Board Secretary, Aurora

Sahin S. Jutla
Roselle

Maria Sinkule
Addison

Thomas Tumminaro
Wheaton

Nick Howard
Glen Ellyn

Isabella "Luna" Escobar
Student Trustee
West Chicago

Glen Ellyn Telephone Guide

(All area codes are 630)

Office	Phone Number
College of DuPage	942-2800
425 Fawell Boulevard, Glen Ellyn, IL	60137-6599
Admissions and Outreach	942-2626
Athletic Office	942-2364
Bookstore	942-2360
Campus Central	942-3000
Cashier	942-2206
Counseling, Advising and Transfer Services	942-2259
Student Financial Assistance	942-2251
McAninch Arts Center	942-3008
Police Department	942-2000
Student Records	942-3838
Student Registration Services	942-2377
Testing Center	942-2400

COD Centers

Office	Phone Number
Addison Center	942-4600
301 S. Swift Road, Door 12, Addison	
Carol Stream Center	942-4888
500 Kuhn Road, Carol Stream	
Naperville Center	942-4700
1223 Rickert Drive, Naperville	

Westmont Center

942-4800

650 Pasquinelli Drive, Westmont

Accreditation Information

Institutional Accreditation

College of DuPage is accredited by:

Higher Learning Commission
230 South LaSalle Street
Suite 7-500
Chicago, IL 60604
phone number: (800) 621-7440

The Higher Learning Commission (HLC) is an independent corporation that was founded in 1895 as one of six regional institutional accreditors in the United States. HLC accredits degree-granting post-secondary educational institutions in the north central region of the United States, which encompasses 19 states.

Regional accreditation ensures that an institution's academic program meets a defined level of quality. Institutions must also be accredited by a federally recognized accrediting agency (such as the Higher Learning Commission) to qualify for participation in federal financial aid programs under Title IV of the Higher Education Act. Title IV programs include student grants, loans and work-study programs.

Recognition

College of DuPage has recognition status through:

Illinois Community College Board
401 East Capitol Avenue
Springfield, IL 62701
Phone Number: (217) 785-0123

Recognition is a state statutory term describing the status of a community college district in Illinois that meets academic, student support, financial, facility and reporting standards as established by the Illinois Community College Board.

Programmatic Accreditation

In addition to Institutional Accreditation by the Higher Learning Commission and Recognition by the Illinois Community College Board, a number of College of DuPage career and technical programs are approved or accredited by appropriate specialized associations or agencies. Some of these programs and accreditations include:

Arts, Communication, and Hospitality Programs

Visual art and design degrees or certificates in Art, Animation, Fashion Design, Fashion Merchandising, Film/Video Production, Game Animation and Design, Graphic Design, Interactive Media, Interior Design, Kitchen and Bath Design, Motion Picture/ Television, Photography, and Television Production.

National Association of Schools of Art and Design (NASAD)

11250 Roger Bacon Drive
Suite 21
Reston, VA 20190
Phone Number: (703) 437-0700

BAKING, PASTRY AND THE CULINARY ARTS

American Culinary Federation (ACF)

180 Center Place Way
St. Augustine, FL 32095
Phone Number: (904) 824-4468

INTERIOR DESIGN

National Kitchen & Bath Association (NKBA)

687 Willow Grove Street
Hackettstown, NJ 07840
Phone Number: (800) 843-6522

Business and Applied Technology Programs

AUTOMOTIVE TECHNOLOGY

National Automotive Technicians Education Foundation (NATEF)

101 Blue Seal Drive S.E.
Suite 101
Leesburg, VA 20175
Phone Number: (703) 669-6650

HORTICULTURE

Horticulture National Association of Landscape Professionals (NALP)

950 Herndon Pkwy #450
Herndon, VA 20170
Phone Number: (703) 736-9666

Equipment and Engine Training Council (EETC)

344 Oak Grove Road, Kings Mountain, NC 28086
(888) 406-1810

LEGAL STUDIES

American Bar Association

321 North Clark Street
Chicago, IL 60654
Phone Number: (312) 988-5000

Nursing and Health Sciences Programs

Dental Hygiene

Commission on Dental Accreditation of the American Dental Association (CODA)

401 North Michigan Ave, Suite 3300
Chicago, IL 60611
Phone Number: (800) 621-8099

Diagnostic Medical Imaging - Sonography and Vascular Sonography

Commission on Accreditation of Allied Health

Education Programs (CAAHEP) (<https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.caahep.org%2F&data=05%7C02%7Cyoonyj263%40cod.edu%7Ce8996a04b81d4c55e36708dd98071506%7Cbe87d92eecd84586b47ca50466d0a%7C0%7C0%7C638833878399164907%7CUnknown%7CTWFPbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUslYiOilwLjAuMDAwMCIslIAiOiJXa%3D%3D%7C0%7C%7C%7C&sdata=mM10MQhpJ2vTMKerA4Ukw8nCqpVI7UD9qexZAsLRX8E%3D&reserved=0>)

9355 - 113th St. N, #7709
Seminole, FL 33775

(737) 210-2350

Joint Review Committee on Education in Diagnostic
Medical Imaging Sonography (JRC-DMS) (<https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.caahep.org%2F&data=05%7C02%7Cyoonyj263%40cod.edu%7Ce8996a04b81d4c55e36708dd98071506%7Cbe87d92eecd84586b47ca50466d0a%7C0%7C0%7C638833878399164907%7CUnknown%7CTWFPbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUslYiOilwLjAuMDAwMCIslIAiOiJXa%3D%3D%7C0%7C%7C%7C&sdata=mM10MQhpJ2vTMKerA4Ukw8nCqpVI7UD9qexZAsLRX8E%3D&reserved=0>)

nam02.safelinks.protection.outlook.com/?url=https
%3A%2F%2Fwww.jrcdms.org%2F%23gsc.tab
%3D0&data=05%7C02%7Cyoony263%40cod.edu
%7Ce8996a04b81d4c55e36708dd98071506%7Cbe87d92eecd84586b47ca50756d041d
%7C0%7C0%7C638833878399173750%7CUnknown
%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiwlLjAuMDAwMCIsIlA
%3D%3D%7C0%7C%7C%7C&sdata=E2eDkZbAl4Xsa%2Fg34PlemKRrr
%2Bq7p1tMyllieOlbpGc%3D&reserved=0)
6021 University Boulevard, Suite 500
Ellicott City, MD 21043
(443) 973-3251
Seminole, FL 33775

Diagnostic Medical Imaging Radiography

Joint Review Committee on Education in Radiologic Technology
(JRCERT)

20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Phone Number: (312) 704-5300

Diagnostic Medical Sonography

Commission on Accreditation of Allied Health Education Program
(CAAHEP)

25400 U.S. Highway 19 North, Suite 158
Clearwater, FL 33763
Phone Number: (727) 210-2350

Eye Care Assistant

International Council of Accreditation (ICA) for Allied Ophthalmic
Education Programs

2025 Woodlane Drive
St. Paul, MN 55125-2998
Phone: (651) 731-7243
Fax: (651) 731-0410

Health Information Technology

Commission on Accreditation for Health Informatics and Information
Management Education (CAHIIM)

200 East Randolph Street, Suite 5100
Chicago, IL 60601
Phone Number: (312) 235-3255

Medical Assistant

Commission on Accreditation of Allied Health Education Programs
(CAAHEP)

9355 - 113th St. N, #7709
Seminole, FL 33775
Phone: (727) 210-2350
Fax: (727) 210-2354

Nuclear Medicine

Joint Review Commission on Educational Programs in Nuclear Medicine
Technology (JRCNMT)

820 W Danforth Rd, #B1
Edmond, OK 73003
Phone Number: (405) 285-0546

Associate Degree in Nursing

Accreditation Commission for Education in Nursing (ACEN)

3390 Peachtree Road NE
Suite 1400
Atlanta, GA 30326
Phone Number: (404) 975-5000

Physical Therapy Assistant

Commission on Accreditation in Physical Therapy (CAPTE)

3030 Potomac Ave., Suite 100
Alexandria, Virginia 22305-3085
Phone Number: (703) 706-3245

Ophthalmic Technician

International Council of Accreditation (ICA) for Allied Ophthalmic
Education Programs

2025 Woodlane Drive
St. Paul, MN 55125-2998
Phone: (651) 731-7243
Fax: (651) 731-0410

Respiratory Care

Commission on Accreditation for Respiratory Care (COARC)

264 Precision Blvd.
Telford, TN 37690
(815) 283-2835

Surgical Technology

Commission on Accreditation of Allied Health Education Programs
(CAAHEP)

9355 - 113th St. N, #7709
Seminole, FL 33775
Phone Number: (727) 210-2350

Surgical FIRST ASSISTANT

Commission on Accreditation of Allied Health Education Programs
(CAAHEP)

9355 - 113th St. N, #7709
Seminole, FL 33775
Phone Number: (727) 210-2350

Social and Behavioral Sciences Programs

HUMAN SERVICES

The Council for Standards in Human Service Education (CSHSE)

3337 Duke Street
Alexandria, VA 22314
Phone Number: (571) 257-3959

HUMAN SERVICES ADDICTION PROGRAM

Illinois Alcohol and other Drug Abuse Professional Certification, Inc.
(IAODAPCA)

401 E Sangamon Avenue
Springfield, IL 62702
Phone Number: (217) 698-8110

Non-Discrimination Statement

The College will not tolerate discrimination or harassment of any kind. No
Student, Employee, Trustee, or visitor will discriminate against or harass
a Student, Employee or visitor on the basis of race, color, religion, sex,

national origin, age, disability, sexual orientation, gender identity and expression, or any other unlawful basis.

Admissions criteria and descriptions of educational programs are available in the College's online semester Class Schedule and College Catalog.

Title IX of the Education Amendments of 1972 (Title IX), 20 U.S.C. Sec. 1681, et seq., and its implementing regulations, 34 C.F.R. Part 106, is a federal law that prohibits discrimination on the basis of sex in any federally funded program or activity. In compliance with Title IX, College of DuPage prohibits sex discrimination, inclusive of sexual harassment and sexual assault.

An individual who wishes to report a concern or complaint relating to discrimination or harassment may do so by contacting one of the College's Title IX co-coordinators:

Student Inquiries

Nathania Montes, Associate Vice President and Dean of Students
College of DuPage
425 Fawell Blvd.
Glen Ellyn, IL 60137
deanofstudents@cod.edu
(630) 942-2485

Employee and/or Visitor Inquiries

Human Resources
College of DuPage
425 Fawell Blvd.
Glen Ellyn, IL 60137
(630) 942-2621

TDD (Telecommunications Device for the Deaf) (630) 858-9692

Americans with Disabilities Act accommodations (630) 942-2141 (voice),
(630) 858-9692 (TDD)

The Title IX co-coordinators can provide information regarding informal dispute resolution processes and formal complaint options. Individuals with complaints of this nature also have the right to file a formal complaint with the United States Department of Education:

Office for Civil Rights (OCR)

400 Maryland Avenue SW
Washington, D.C. 20202-1100
Customer Service Hotline: (800) 421-3481
Facsimile: (202) 453-6012
TDD: (877) 521.2172
Email: OCR@ed.gov
Web: www.ed.gov/ocr (<http://www.ed.gov/ocr/>)

Student Right-To-Know: Enrollment, Graduation and Transfer

The following list provides prospective students, current students and community members with information, facts and figures about College of DuPage. Privacy, right-to-know, crime statistics, special services for students with disabilities, athletic participation and equity, and other institutional information can be found on the College's website at cod.edu/yrtk (<http://cod.edu/yrtk/>).

1. Student Right-to-Know: Enrollment, Graduation and Transfer Rates
2. Campus Crime Statistics
3. Gender Equity in Athletic Programs
4. Privacy of Student Education Records/FERPA
5. Services for Students With Disabilities/Special Student Services
6. Financial Aid
7. Withdrawal Policy
8. Refund Policy
9. Medical Withdrawal
10. Sexual Harassment
11. Non-Discrimination Policy
12. Student Education Records

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act of 1974, as amended, sets forth requirements designed to protect the privacy of student education records. FERPA governs (1) release of education records and (2) access to education records. More information regarding this policy can be found on the College's website at cod.edu/about/administration/consumer_legal_information/ferpa.aspx (https://www.cod.edu/about/administration/consumer_legal_information/ferpa.aspx).

Drug-Free Environment

To further the educational aims of the institution and in accordance with state and federal laws, College of DuPage seeks to improve the educational and work environment of the College and its activities by eliminating drugs in the College.

The use of alcoholic beverages and illegal controlled substances is a major concern on college campuses. There are resources available and current policies at College of DuPage regarding the use of drugs and alcohol. The following information is provided in accordance with the Drug-Free Schools and Communities Act (Public Law 101-226) and the Drug-Free Workplace Act (Public Law 100-690) and Board Policy, No. 15-30, Drug and Alcohol Free College.

Health Risks

The consumption of alcohol and drugs at any level may have serious risks. For example: altered mood (anxiety, apathy, paranoia, psychosis); altered behavior (impaired coordination); sleep disorders, addiction; altered breathing and heart rate; communication of infectious disease; distorted senses; unconsciousness leading to coma; and permanent damage to the liver, heart and central nervous system leading to death. For more information, consult a physician or the local or college library.

Student Complaint Process

It is the goal of College of DuPage that any disagreements be discussed and resolved in a professional manner. When appropriate, attempts should be made to resolve the issue informally with the individual or department directly involved. If an issue or problem still exists, the following formal complaint process should be followed. All formal complaints must be put in writing using the online Student Complaint Form (https://cm.maxient.com/reportingform.php?CollegeofDuPage&layout_id=4).

NOTE: The Student Complaint Form does not apply to grade appeals, tuition appeals, violations of the Code of Student Conduct or Academic Conduct, or violations of discrimination, harassment, and sexual harassment.

Student Complaint Process

1. When appropriate, attempt to resolve the issue informally with the individual or office involved.
2. If the situation remains unresolved, complete and submit the online Student Complaint Form (https://cm.maxient.com/reportingform.php?CollegeofDuPage&layout_id=4).
3. The completed form will be automatically forwarded to the Dean of Student Affairs who will then disseminate the complaint to the appropriate college official.
4. The responsible college official will first investigate the complaint by interviewing the complainant and other involved parties. A written response (hard copy or email) will be sent to the student and the Dean of Student Affairs within five days of receiving the complaint.

In the event that the complaint remains unresolved, the complainant may contact the Dean of Student Affairs who will investigate and provide a written response to the appropriate individuals.

All formal complaints will be monitored to ensure action has been taken. A copy of the final resolution of any formal complaint will be forwarded to the Dean of Student Affairs where a record of all formal student complaints will be retained.

State and Federal Reporting Information

Under Federal Rule 34 CFR §600.9 and §668.43(b), Title IV-eligible institutions must provide its students or prospective students with contact information for filing complaints with its accreditor and the state.

- Illinois Community College Board (<https://www.iccb.org/students/filing-complaints-about-an-illinois-community-college/>)
- Higher Learning Commission (<https://www.hlcommission.org/Student-Resources/complaints.html>)

Contact Information**Dean of Students**

(630) 942-2485

deanofstudents@cod.edu

ACADEMIC CALENDAR

Academic Calendar 2025-2026

Fall Session - 2025

Date	Event
Wednesday, August 20 to Friday, August 22	All Faculty Return/Convocation Days
Monday, August 25	16-Week, First 12-Week, and First 8-Week Classes Begin
Monday, September 1	Legal Holiday (Labor Day) No Classes
Monday, September 22	Second 12-Week Classes Begin
Saturday, October 4	Last Day to Withdraw - First 8-Week Classes
Tuesday, October 14	In-Service Day/Professional Day No Classes
Saturday, October 18	End of First 8-Week Classes
Monday, October 20	Second 8-Week Classes Begin
Saturday, October 25	Last Day to Withdraw - First 12-Week Classes
Saturday, November 15	End of First 12-Week Classes
Sunday, November 16	Last Day to Withdraw - 16-Week Classes
Sunday, November 23	Last Day to Withdraw - Second 12-Week Classes
Wednesday, November 26	College Open No Classes
Thursday, November 27	Last Day to Withdraw - Second 8-Week Classes
Thursday, November 27 to Sunday, November 30	Thanksgiving Recess No Classes
Friday, December 12	End of 16-Week and Second 12-Week Classes Instruction (Final Examination Period Follows)
Saturday, December 13	End of Second 8-Week Classes
Saturday, December 13 to Friday, December 19	Final Evaluations/Culminating Activities for 16-Week and Second 12-Week Classes

Spring Session - 2026

Date	Event
Monday, January 19	Legal Holiday (MLK Jr. Day) No Classes
Wednesday, January 21 to Friday, January 23	In-Service Days/Professional Days No Classes
Monday, January 26	16-Week, First 12-Week, and First 8-Week Classes Begin
Monday, February 23	Second 12-Week Classes Begin
Sunday, March 8	Last Day to Withdraw - First 8-Week Classes
Saturday, March 21	End of First 8-Week Classes
Monday, March 23	Second 8-Week Classes Begin
Sunday, March 29	Last Day to Withdraw - First 12-Week Classes

Monday, March 30 to Spring Break **No Classes**

Sunday, April 5

Sunday, April 5	Easter No Classes
Monday, April 13	Last Day to Withdraw - 16-Week Classes
Saturday, April 25	End of First 12-Week Classes
Sunday, April 26	Last Day to Withdraw - Second 12-Week Classes
Tuesday, April 28	Last Day to Withdraw - Second 8-Week
Friday, May 15	End of 16-Week and Second 12-Week Classes Instruction (Final Examination Period Follows)
Saturday, May 16	End of Second 8-Week Classes
Saturday, May 16 to Friday, May 22	Final Evaluations/Culminating Activities for 16-Week and Second 12-Week Classes
Friday, May 22	Commencement

Summer Session - 2026

Date	Event
Monday, June 1	First 5-Week, First 8-Week, and 10-Week Classes Begin
Monday, June 15	Second 8-Week Classes Begin
Thursday, June 18	Observed Holiday (Juneteenth) No Classes
Friday, June 19	Legal Holiday (Juneteenth) No Classes
Tuesday, June 23	Last Day to Withdraw - First 5-Week Classes
Wednesday, July 1	End of First 5-Week Classes
Thursday, July 2	Observed Holiday (Independence Day) No Classes
Friday, July 3	Legal Holiday Observed (Independence Day) No Classes
Saturday, July 4	Legal Holiday (Independence Day) No Classes
Monday, July 6	Second 5-Week Classes Begin
Thursday, July 9	Last Day to Withdraw - First 8-Week Classes
Sunday, July 19	Last Day to Withdraw - 10-Week Classes
Thursday, July 23	Last Day to Withdraw - Second 8-Week Classes
Saturday, July 25	End of First 8-Week Classes
Saturday, August 1	Last Day to Withdraw - Second 5-Week Classes
Saturday, August 8	End of 10-Week, Second 8-Week, and Second 5-Week Classes

Revised, Board Approved July 17, 2025

More information on Academic Calendar dates

- “Last Day to Withdraw without submitting a Late Withdrawal Appeal” – Dates which fall outside of normal business days, for example Saturday/Sunday (spring and fall terms) and Friday/Saturday/Sunday (summer term) will be given a one-day grace period to the next business day without penalty. Students must call or email Student Registration Services (<https://cod.edu/registration/>) to initiate the withdraw (emails must be sent from dupage.edu account to registration@cod.edu) (registration@cod.edu).
- Session End Dates include finals week for regular 16-week and 12-week sessions.
- Refund dates for classes are found on the Student Schedule in myACCESS for students. To view your schedule, log into the portal at inside.cod.edu (<https://inside.cod.edu>). After logging in, click on **myACCESS for Students** then select “Academic Profile” from the

drop-down menu, then select "My Class Schedule." Select the current term.

- The refund policy is as follows:
 - 100% refund of tuition and fees will be granted during the first 7% of the number of calendar days in the session based on the start date of the class.
 - 50% refund of tuition and fees will only be granted during the first 8-12% of the number of calendar days in the session based on the start date of the class.
 - Dropping a course during a refund period will not result in a "W" grade. Refund dates are rounded down (Ex: 3.85 days = 3 days; 4.12 days = 4 days).

Calendars

For more detailed dates and deadlines, see the full version of each calendar:

- Enrollment Calendar (<https://cod.edu/student-services/important-dates.aspx>)
- Campus Events Calendar (<https://cod.edu/calendar/>)
- Financial Aid Calendar (https://cod.edu/fa_dates/)
- Payment Plan Calendar (<https://cod.edu/paymentplan/>)

Academic Calendar 2026-2027

Fall Session - 2026

Date	Event
Wednesday, August 19 to Friday, August 21	All Faculty Return/Convocation Days
Monday, August 24	16-Week, First 12-Week, and First 8-Week Classes Begin
Monday, September 7	Legal Holiday (Labor Day) No Classes
Monday, September 21	Second 12-Week Classes Begin
Saturday, October 3	Last Day to Withdraw - First 8-Week Classes
Tuesday, October 13	In-Service Day/Professional Day No Classes
Saturday, October 17	End of First 8-Week Classes
Monday, October 19	Second 8-Week Classes Begin
Saturday, October 24	Last Day to Withdraw - First 12-Week Classes
Saturday, November 14	End of First 12-Week Classes
Sunday, November 15	Last Day to Withdraw - 16-Week Classes
Sunday, November 22	Last Day to Withdraw - Second 12-Week Classes
Wednesday, November 25	College Open No Classes
Thursday, November 26	Last Day to Withdraw - Second 8-Week Classes
Thursday, November 26 to Sunday, November 29	Thanksgiving Recess No Classes
Saturday, December 12	End of Second 8-Week Classes

Monday, December 14 to Friday, December 18

Culminating Activities for 16-Week and Second 12-Week Classes

Friday, December 18

End of 16-Week and Second 12-Week Classes

Spring Session - 2027

Date	Event
Wednesday, January 13 to Friday, January 15	In-Service Days/Professional Days No Classes
Monday, January 18	Legal Holiday (MLK Jr. Day) No Classes
Tuesday, January 19	16-Week, First 12-Week, and First 8-Week Classes Begin
Monday, February 8	Second 12-Week Classes Begin
Monday, March 1	Last Day to Withdraw - First 8-Week Classes
Saturday, March 13	End of First 8-Week Classes
Monday, March 15	Second 8-Week Classes Begin
Sunday, March 21	Last Day to Withdraw - First 12-Week Classes
Sunday, March 28	Easter No Classes
Monday, March 29 to to Sunday, April 4	Spring Break No Classes
Saturday, April 10	Last Day to Withdraw - 16-Week Classes
Thursday, April 15	Last Day to Withdraw - Second 12-Week Classes
Saturday, April 17	End of First 12-Week Classes
Monday, April 19	Last Day to Withdraw - Second 8-Week
Saturday, May 8	End of Second 8-Week Classes
Monday, May 11 to Friday, May 14	Culminating Activities for 16-Week and Second 12-Week Classes
Friday, May 14	End of 16-Week and Second 12-Week Classes
Friday, May 14	Commencement

Summer Session - 2027

Date	Event
Tuesday, June 1	First 5-Week, First 8-Week, and 10-Week Classes Begin
Monday, June 14	Second 8-Week Classes Begin
Thursday, June 17	Observed Holiday (Juneteenth) No Classes
Friday, June 18	Legal Holiday Observed (Juneteenth) No Classes
Saturday, June 19	Legal Holiday (Juneteenth) No Classes
Thursday, June 24	Last Day to Withdraw - First 5-Week Classes
Saturday, July 3	End of First 5-Week Classes
Sunday, July 4	Legal Holiday (Independence Day) No Classes
Monday, July 5	Legal Holiday Observed (Independence Day) No Classes
Tuesday, July 6	Second 5-Week Classes Begin
Thursday, July 8	Last Day to Withdraw - First 8-Week Classes
Sunday, July 18	Last Day to Withdraw - 10-Week Classes
Thursday, July 22	Last Day to Withdraw - Second 8-Week Classes
Saturday, July 24	End of First 8-Week Classes
Saturday, July 31	Last Day to Withdraw - Second 5-Week Classes
Saturday, August 7	End of 10-Week, Second 8-Week, and Second 5-Week Classes

Board Approved July 17, 2025

More information on Academic Calendar dates

- “Last Day to Withdraw without submitting a Late Withdrawal Appeal”
 - Dates which fall outside of normal business days, for example Saturday/Sunday (spring and fall terms) and Friday/Saturday/Sunday (summer term) will be given a one-day grace period to the next business day without penalty. Students must call or email Student Registration Services (<https://cod.edu/registration/>) to initiate the withdraw (emails must be sent from dupage.edu account to registration@cod.edu) (registration@cod.edu).
- Session End Dates include finals week for regular 16-week and 12-week sessions.
- Refund dates for classes are found on the Student Schedule in myACCESS for students. To view your schedule, log into the portal at inside.cod.edu (<https://inside.cod.edu>). After logging in, click on **myACCESS for Students** then select “Academic Profile” from the drop-down menu, then select “My Class Schedule.” Select the current term.
- The refund policy is as follows:
 - 100% refund of tuition and fees will be granted during the first 7% of the number of calendar days in the session based on the start date of the class.
 - 50% refund of tuition and fees will only be granted during the first 8-12% of the number of calendar days in the session based on the start date of the class.
 - Dropping a course during a refund period will not result in a “W” grade. Refund dates are rounded down (Ex: 3.85 days = 3 days; 4.12 days = 4 days).

Calendars

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- Campus Events Calendar (<https://cod.edu/calendar/>)
- Financial Aid Calendar (https://cod.edu/fa_dates/)
- Payment Plan Calendar (<https://cod.edu/paymentplan/>)

HOW TO GET STARTED

Admissions Policies and Procedures

Admission at College of DuPage is open to anyone who is a high school graduate, has earned a GED or is at least 18 years old and can benefit from college-level instruction. To qualify for federal student aid, students must have a high school diploma or a recognized equivalent such as a General Educational Development (GED) certificate or have completed a high school education in a homeschool setting approved under state law.

Admission can be granted to others by the Director of Admissions and Outreach (Board Policy 20-50). The College prohibits discrimination in its admission, employment, and educational programs or activities on the basis of race, color, sex, religion, creed, national origin, age, ancestry, marital status, sexual orientation, arrest record, military status or unfavorable military discharge, citizenship status, and physical or mental handicap or disability (Board Policy 20-5).

Prospective students need to apply (<https://admissions.cod.edu/>) to the Office of Admissions and Outreach. Students must also submit official transcripts from high schools and colleges or universities they have attended.

No entrance exams are required for admission; however, entrance exam information is helpful to college advisors who assist students with their educational planning. Students are encouraged to submit national college entrance tests such as the ACT or SAT. Placement tests in reading, writing and mathematics may be needed.

Registration Services

The Office of Student Registration Services provides a variety of enrollment services including assistance with registering for credit classes, switching courses, late registration, waitlist options, auditing, withdrawing from courses and changing residency status.

Registration staff members are available to assist students with course registration after a student has completed the admissions application and received assistance with course selection. Registration staff are available on campus, by phone at (630) 942-2377 or email registration@cod.edu (registration@cod.edu) during regular business hours. For more information, please visit cod.edu/registration (<https://cod.edu/registration/>).

Registering for Classes

Students are encouraged to register early to select the classes and schedule that fit their needs. After a student selects and registers for classes, they will need to either pay their balance in full or enroll in one of our convenient payment plans. Every student is required to select a payment option at the time of registration, including students who are expected to receive financial aid. If a payment option is not selected at the time of registration, the student may be dropped from their classes for non-payment. For more information on payment options, visit cod.edu/paymentplan (<https://cod.edu/paymentplan/>).

Options to Register

When eligible, students may register in one of four ways:

1. **Online Registration** (Student Planning (<https://selfserv.cod.edu/Student/Planning/?hideProxyDialog=false>))
College of DuPage offers various tools for students to register online. To select courses and register online, a student must be an admitted

or returning student in good academic standing with a College of DuPage username and password.

2. In-Person

Visit the Office of Student Registration Services in the Student Services Center (SSC), Room 2221, during office hours for assistance with registration. The COD Centers and Campus Central will also provide registration assistance.

3. By Phone

Students may register by calling the Office of Student Registration Services at (630) 942-2377.

4. Using the Chap App

Students with a College of DuPage username and password may register for classes using the mobile device application available in either Android or iOS platform.

College of DuPage does not allow course registration via e-mail; however, a student can e-mail the Office of Student Registration Services at registration@cod.edu with inquiries.

Returning Student Registration

Returning students will be eligible for priority registration based on the number of credit hours the student has successfully completed at College of DuPage. Priority is given to those students with a higher number of completed hours. Priority registration does not include transfer credits or demonstrated-competency credits.

To check the number of completed College of DuPage credit hours:

1. Go to [myACCESS.cod.edu](https://myaccess.cod.edu) (<https://myaccess.cod.edu>).
2. Log in to your account.
3. Under "Academic Profile" click on "My Profile." See Institutional Completed Credits.

The returning student registration dates will be listed online at [cod.edu/registration](http://www.cod.edu/registration/) (<http://www.cod.edu/registration/>).

Students can contact the Office of Student Registration Services at (630) 942-2377 or via e-mail at registration@cod.edu with any questions.

New and Transfer Student Registration

Registration for new and transfer students who have never attended College of DuPage will begin the day after returning student registration ends. The new student registration date will be listed online at [cod.edu/registration](http://www.cod.edu/registration/) (<http://www.cod.edu/registration/>).

After registering for classes, all new and transfer students should also be sure to register for New Student Orientation. Information for New Student Orientation can be found at cod.edu/nso (<http://cod.edu/nso/>).

Payment Policy

All students are required to pay their tuition and fees at the time of registration. Students may pay by cash, check or credit card. Students unable to pay in full must enroll in a convenient Payment Plan. Students receiving financial aid (i.e., grants and loans) must enroll in the College's deferred payment plan. Direct links to these payment options are found online at cod.edu/tuition (<http://cod.edu/tuition/>).

Credit Class Registration Deadlines

Students are encouraged to register early. The deadline for a student to register for a credit course without requiring a late registration permit from the instructor will be the first day of class. This includes 16-Week, 12-Week, 10-Week, 8-Week and 5-Week classes. For example, if the

first day of class falls on a Monday, a student may register for this specific class until 11:59 p.m. on that same Monday. If the first day of class is on a Wednesday, a student may register for this specific class until 11:59 p.m. on that same Wednesday. Exceptions to this rule are custom courses or courses with required safety training, licensure, accreditation or mandatory seat hours for legal reasons. Students can visit [myACCESS.cod.edu](https://myaccess.cod.edu) (<https://myaccess.cod.edu>) to view start and end dates for all credit courses.

Late Registration

Students who want to register late for a course after the first day of class must request a permit from the instructor. Issuance of a late registration permit is up to the instructor's discretion. Visit [cod.edu/registration](http://www.cod.edu/registration/) (<http://www.cod.edu/registration/>) for instructions on requesting a permit.

Once a permit has been issued, it is the student's responsibility to contact the Office of Student Registration Services to register for the class. The permit is only valid for three (3) business days after the issuance date. A \$10 late registration fee will be charged for each class that requires a late registration permit. Students are expected to take full responsibility for making up any missed coursework associated with a late registration.

Waitlist for Full Classes

Credit courses are subject to a capacity of students allowed to register for a course. When a class has reached that capacity, it is considered full. Students who want to register for a class that is full will have the opportunity to be added to a waitlist for that course. Students can visit myaccess.cod.edu (<https://myaccess.cod.edu>) to view the course capacity, seats available and number of students on the waitlist. A student may select the waitlist option when registering or by calling (630) 942-2377.

After a student is added to a waitlist, they will be notified when a seat becomes available. The student will receive a notification via their College of DuPage (@dupage.edu) email account and will have until 11:59 p.m. that day to register for the open seat. If the student does not register for the open seat before 11:59 p.m. the same day, the student will be removed from the waitlist and the next student on the waitlist will be notified. If the student misses the opportunity to register and wants to be placed back on the waitlist, the student will be placed at the bottom of the waitlist. It is the sole responsibility of the student to check their e-mail to receive waitlist notifications.

The waitlist option will remain active through the first day of the course for all sessions excluding custom courses or courses with required safety training, licensure, accreditation or mandatory seat hours for legal reasons. After the first day of the course, a student may request a Registration Permit to Overload a Full Class from the instructor to join the course. Overloading a course is up to the instructor's discretion and an instructor may only issue a Registration Permit to Overload a Full Class after the first day of the course. The instructor can send the Registration Permit to overload a full class by e-mail directly to the Office of Student Registration Services and it will only be valid for one business day after it is issued.

Students can either register for an open section of a course or be added to a waitlist for a full section of the same course. If a student registers for a different section of the same course, they will be dropped from the waitlisted section. For example, if a student is added to the waitlist for English-1101-001 and then registers for English-1101-007, the student will be removed from the English-1101-001 waitlist.

For more information on the waitlist options, students can call the Office of Student Registration Services at (630) 942-2377 or email registration@cod.edu.

Auditing a Class

Auditing a course allows a student to take a class without the benefit of a grade or credit for a course. College of DuPage students may choose to audit a course. A student auditing a course will not be considered enrolled in that course for purposes of financial aid, standards of academic progress or athletic eligibility. The final grade for the course will be shown on the official transcript as an audit with the letter grade of "X."

The audit grade of "X" earns no credit, it will not be applied to a degree or certificate and it does not affect the grade point average.

Intent to audit a course must be indicated at the time of registration. The tuition per credit hour for auditing a course is higher than the standard credit hour tuition. If a student wishes to audit a course that has already started, the student will need to request a permit from the instructor in order to audit the course. A student may also request to change the course grading option from a grade to an audit up until the midterm date of the course. Once the audit designation has been established, it cannot be revoked.

Students may not request to audit a class after midterm. The audit grade of "X" will be recorded on the student's permanent academic record (transcript). For more information on the option to audit a course, students can call the Office of Student Registration Services at (630) 942-2377 or email registration@cod.edu.

Prerequisites

A prerequisite is a listed course or other enrollment criteria that must be satisfied prior to registration. Before registering for any course with a listed prerequisite, students are expected to have met the prerequisite requirement(s) or be currently enrolled in the prerequisite course. Our system will automatically check that all prerequisites for each course have been met. Visit cod.edu/records (<https://cod.edu/records/> proof-of-prerequisite.html) to learn more about prerequisites or email prereq@cod.edu.

To view the specific course descriptions and prerequisites, view the current course Catalog at cod.edu/catalog or visit myACCESS. There are some courses that allow the prerequisites to be waived by the consent of the instructor. You may only request a waiver for a prerequisite for a course that specifies "consent of the instructor" in the course description.

Options to Request a Registration Permit for a Prerequisite Waiver

1. Students can log into myACCESS and select "Request a Permit" located under the Registration heading. Note: This option is only available until the 10th instructional day of class.
2. Students can locate the instructor's e-mail address in myACCESS and e-mail the instructor directly to request a Registration Permit for a Prerequisite Waiver.

Course/Credit Load

A student must be enrolled in a minimum of 12 credit hours in fall or spring semesters and a minimum of six hours in summer semester to be considered a full-time student. Half-time status is 6 to 11 credits during fall or spring semesters and 3 to 5 in summer semester. Students wishing to enroll in more than 19 credit hours in a semester require permission

from a student success counselor. Visit cod.edu/counseling (<https://cod.edu/counseling/>) for more information.

District 502 Residency

For the purpose of determining tuition and fees, students enrolling for credit courses at College of DuPage are classified as in-district students, out-of-district students, out-of-state students or international students. Visit cod.edu/residency (<http://cod.edu/residency/>) to view the District 502 Residency policies and map.

In-District Students

Students who live within College of DuPage District 502 for at least 30 days prior to the beginning of the semester are classified as residents of the district and are eligible for the in-district tuition rate. Visit cod.edu/tuition (<http://cod.edu/tuition/>) for the current in-district student tuition rate.

Out-of-District Students

Students who live in Illinois but outside of College of DuPage District 502 are classified as out-of-district students and will be subject to the out-of-district tuition rate. Visit cod.edu/tuition (<http://cod.edu/tuition/>) for the current out-of-district student tuition rate.

Out-of-State and International Students

Students whose legal residence is outside the state of Illinois are classified as out-of-state students and will be subject to the out-of-state tuition rate. Students whose permanent residence is outside the United States and who wish to attend College of DuPage while on a student visa, other visa, or visa waiver program are classified as international students and will be subject to the international student tuition rate. Visit cod.edu/tuition (<http://cod.edu/tuition/>) for the current out-of-district and international student rates.

Proof of Residency

Students who live within Community College District 502 for at least 30 days immediately prior to the beginning of the semester are classified as residents of the College of DuPage district. Those students are charged tuition according to the in-district tuition rate. Students who lived outside Community College District 502 that have changed residency to in-district must provide proof to receive the in-district tuition rate. All proofs of residency are subject to verification. For more information on the required documentation to prove residency, visit cod.edu/residency (<http://cod.edu/residency/>) or contact the Office of Student Registration Services at (630) 942-2377 or registration@cod.edu.

Cooperative Agreements for Instructional Programs

Comprehensive Agreement Regarding the Expansion of Educational Resources (CAREERS)

College of DuPage is a member of the Comprehensive Agreement Regarding the Expansion of Educational Resources (CAREER), an agreement that provides expanded educational services with other community colleges in Illinois. Members of the CAREER consortium offer in-district tuition rates for select career and technical programs. CAREERS allows students from a participating institution to enroll in an approved program at another participating institution if the program is not available in his/her home district, and will be charged in-district tuition. There is no chargeback to a student's home district. The process

to apply for an Incoming or Outgoing Cooperative Agreement is explained below.

Participating Institutions

Black Hawk College, Carl Sandburg College, College of DuPage, College of Lake County, Danville Community College, Elgin Community College, Heartland Community College, Highland Community College, Illinois Central College, Illinois Eastern Community Colleges, Illinois Valley Community College, John A. Logan College, John Wood Community College, Joliet Junior College, Kankakee Community College, Kaskaskia College, Kishwaukee College, Lake Land College, Lewis and Clark Community College, Lincoln Land Community College, McHenry County College, Moraine Valley Community College, Morton College, Oakton Community College, Parkland College, Prairie State College, Rend Lake College, Richland Community College, Rock Valley College, Sauk Valley Community College, Shawnee Community College, South Suburban College, Southeastern Community College, Southwestern Illinois College, Spoon River College, Waubesa Community College and William Rainey Harper College.

Incoming Cooperative Agreements

Individuals who want to enroll in an Associate in Applied Science degree or certificate program not offered by their own community college may apply for a cooperative agreement at College of DuPage. The process begins with the student applying through their own community college at least 30 days prior to the beginning of the term for which they intend to enroll at College of DuPage. Cooperative agreements are available for community colleges within the State of Illinois. Most community college districts do not approve cooperative agreements for single courses, developmental courses or non-credit courses. For information on applying for a cooperative agreement, contact the Office of Student Registration Services, Student Services Center (SSC), Room 2221, call (630) 942-2377 or e-mail registration@cod.edu.

Outgoing Cooperative Agreements

Students residing in College of DuPage District 502 who wish to enroll in an approved program of study not offered by College of DuPage, may be eligible for a cooperative agreement to attend another community college in Illinois that offers that curriculum. A student approved for a cooperative agreement will be entitled to that college's in-district tuition rates. (Board Policy 25-50). The process to apply for a cooperative agreement to attend another community College in Illinois must be filed 30 calendar days prior to the start of term. Single courses, developmental courses, non-credit courses, and Associate in Arts or Associate in Science degrees do not qualify for cooperative agreements. For information on applying for a cooperative agreement, contact the Office of Student Registration Services, Student Services Center (SSC), Room 2221, call (630) 942-2377 or email registration@cod.edu.

Tuition and Fees for Credit Classes

Admissions/Recording Fee

A \$20 non-refundable admission fee is charged the first time a student applies to the College for credit courses. The fee is not charged to district residents age 65 or older, veterans or those with demonstrated need. Contact the Office of Admissions and Outreach at (630) 942-2380 for more information.

In-District Student Tuition

Students who meet the criteria of an in-district resident pay in-district tuition.¹

Out-of-District Student Tuition

Students who meet the criteria of an out-of-district resident pay out-of-district tuition.¹

Out-of-State Tuition and International Student Tuition

Students who meet the criteria of an out-of-state and/or international resident pay out-of-state tuition.¹

Special Tuition Categories

Employed Full-Time (35+ Hours) In-District

Students whose legal residence is outside Community College District 502, but are employed for a minimum of 35 scheduled hours per week within District 502, may be entitled to receive the in-district tuition rate. Tuition adjustments will not be considered after mid-term. To be considered for the work in-district residency classification, a student must provide documentation each semester. Visit cod.edu/residency (<http://cod.edu/residency/>) to view the current list of documents required.

Senior Citizens

Senior citizens (age 65 or over) whose permanent residence is within District 502 pay a reduced tuition rate.¹ Visit cod.edu/tuition (<http://cod.edu/tuition/>) for the current senior citizen student rates. Students 65 years of age and older may receive free tuition if their annual household income is less than the threshold amount in Section 4 of the Senior Citizen Tax Relief Act. Visit cod.cod.edu/registration to view the Senior Citizen Tuition Waiver Form.

Online Courses

Online courses carry an additional online course fee¹. Visit cod.edu/tuition (<http://cod.edu/tuition/>) for the current online student rates.

Credit Course Audit

Students who audit classes are charged a higher tuition rate.¹ Visit cod.edu/tuition (<http://cod.edu/tuition/>) for the current audit student rates.

Variable Tuition

Certain programs carry a variable tuition rate.¹ Visit cod.edu/tuition (<http://cod.edu/tuition/>) for a list of programs and for the current rate.

Fees

Service Fee

A service fee is included in the tuition for each semester credit hour.¹

Late Registration Fee

A \$10 late registration fee will be charged for each class that requires a Registration Permit for Late Enrollment.

Payment Plan Fee

Students who choose the payment plan are charged a payment plan fee. An additional fee is assessed per semester if an automatic bank payment or credit card payment is returned.¹

Returned Check/Charge Card Fee

Students are charged a fee for each check or charge card rejected by the bank.¹

Course Fees

Certain courses require the payment of course fees or special registration fees. Course fees are printed in the class listing of the Class Schedule or in myACCESS.

¹ Current tuition rates and fees are printed in the current Class Schedule and are available online at <http://cod.edu/tuition> (<http://cod.edu/tuition/>).

Withdrawals, Refunds and Appeals

Dropping vs. Withdrawing

Dropping a Credit Class During the Refund Period

Dropping a credit class can only be done within the first 12 percent of the number of calendar days in the session based on the start date of class. A 100 percent refund of tuition and fees will be granted during the first 7 percent of the number of calendar days in the session based on the start date of the class. A 50 percent refund of tuition and fees will only be granted during the first 8 to 12 percent of the number of calendar days in the session based on the start date of the class. Visit cod.edu/reg_calendar to view the number of calendar days within a course. Students will only receive a refund when a class is dropped during the refund period. Students can view their specific refund dates for each class on the student's class schedule, which can be obtained by logging into myACCESS, and clicking "My Class Schedule" located under the Academic Profile heading. Students may also call the Office of Student Registration Services at (630) 942-2377 to obtain the last day to drop a course for a refund. When a class is dropped during the refund period, it will not appear on the student's transcript. After the refund period, removing a class from your schedule is considered a withdrawal (see below).

Withdrawal from Credit Classes

If a student decides to remove a course from their schedule after the refund period, it becomes a withdrawal. Students will not receive a refund during the withdrawal period. A "W" will be indicated on the student's transcript. The "W" is not part of the calculation for GPA. The final day for a student to withdraw from any course will be equal to 75 percent of the time for the respective academic session. After this date, a student must request a Late Withdrawal Appeal Due to Extenuating Circumstances. The last day to withdraw is listed on the student's class schedule, which can be obtained by logging into myACCESS, and clicking "my class schedule" located under the Academic Profile heading. This date can also be found on the registration calendar online by visiting cod.edu/reg_calendar. A student can obtain a copy of the calendar by visiting the Office of Student Registration Services, Student Services Center (SSC), Room 2221, or by contacting the office at (630) 942-2377 or at registration@cod.edu.

Late Withdrawal Appeal

After the withdrawal deadline, students wishing to withdraw from their courses will be required to submit a Late Withdrawal Appeal Due to Extenuating Circumstance as well as appropriate documentation to the Office of Student Registration Services. Students who are granted approval to withdraw by petition will not be eligible for refunds of tuition or fees and will have a "W" grade on their transcript. Late withdrawal appeals must be submitted at least one day prior to the last regular class meeting. Students will not be eligible to petition for late withdrawal during the week of final exams. The form along with the guidelines to submit a Late Withdrawal Appeal Due to Extenuating Circumstance can be found by visiting cod.edu/registration (<https://cod.edu/registration/>).

Medical Appeal

Students who are not able to attend classes due to a documented medical reason can submit a Medical Withdrawal Appeal to the Office of Student Registration Services, Student Services Center (SSC), Room 2221. Appeals must be accompanied by documentation from a physician or medical institution to verify the medical condition, date of onset and estimated length of treatment. Requests for medical withdrawals are reviewed by a Medical Appeals Committee and the decision made by the Medical Appeals Committee is final. A tuition refund may be issued when appropriate within the guidelines of College of DuPage's refund policy. Failure to provide adequate documentation at the time of submission will result in denial of the appeal. The student will receive written notification of the decision within three (3) weeks of submitting the request to the Office of Student Registration Services. Medical Withdrawal Appeal forms are available in the Office of Student Registration Services (SSC 2221) and online at cod.edu/registration (<https://cod.edu/registration/>).

Tuition Appeal

A Tuition Appeal Due to Extenuating Circumstances is for students who are requesting a refund of their tuition charges due to extenuating circumstances preventing attendance that occurred during a given term. Documentation of the extenuating circumstance is required and failure to provide adequate documentation at the time of submission will result in denial of the appeal. A refund can only be considered when a student has withdrawn from a class and has received a "W" grade. Filing an appeal does not relieve the current student financial obligation to College of DuPage. The student is responsible for all charges assessed on their account pending a decision on their appeal. The appeals are reviewed by a committee and the decision process takes approximately four weeks. Additional time may be necessary to contact faculty and for instructional, financial aid or advising issues to be reviewed by the dean. A student will be notified of the committee's decision by mail. The decision made by the committee is final. The form to submit a Tuition Appeal Due to Extenuating Circumstances is available in the Office of Student Registration Services (SSC 2221) and online at [cod.edu/registration](http://www.cod.edu/registration) (<http://www.cod.edu/registration/>).

Late Registration Request

After the midterm period of a given course, the student must submit a Late Registration Appeal to register for any credit course. All Late Registration Appeals must include a reason for the appeal along with an instructor's permit to register late. The form to submit a Late Registration Appeal is available in the Office of Student Registration Services (SSC 2221) and online at [cod.edu/registration](http://www.cod.edu/registration) (<http://www.cod.edu/registration/>).

Refunds

Students seeking refunds for credit classes will be reimbursed according to the procedures located on the Registration Calendar at [cod.edu/registration](http://www.cod.edu/registration) (<http://www.cod.edu/registration/>). Refund dates are posted for each class on the student's Class Schedule at myACCESS.cod.edu (<http://myACCESS.cod.edu>).

Student Financial Aid

Financial aid programs strive to reduce financial barriers to a college education. Most federal and state financial aid programs are based on demonstrated financial need. Financial need is the difference between the resources of the student and/or family and the cost of attending college.

Financial aid is available to any eligible student enrolled in an eligible degree or certificate program. Grants, loans, on-campus employment

and local scholarships are options available to help students meet their educational expenses. All federal/state financial aid programs are subject to government review and are subject to change.

The Free Application for Federal Student Aid (FAFSA) is on the web at www.fafsa.gov (<http://www.fafsa.gov>). The FAFSA applications are available as early as Oct. 1. Funds will be awarded according to the date of a student's completed financial aid file, financial need, and fund availability.

In general, a student may qualify for most federal and state financial aid if the following conditions are met:

- The student must be enrolled at least half-time as a regular student in an eligible program.
- The student must be a U.S. citizen or an eligible non-citizen.
- The student must demonstrate financial need.
- The student must maintain satisfactory academic progress.
- The student must not be in default on a Perkins, Direct, Stafford or PLUS/SLS loan.
- The student cannot have an overpayment on a Federal Pell Grant or a Supplemental Educational Opportunity Grant.

For additional information, contact the Office of Student Financial Assistance, (630) 942-2251.

Grants

Federal Pell Grant

The Federal Pell Grant helps undergraduate students who have not earned a bachelor's or professional degree from either a U.S. or foreign college to pay for their education. Eligibility is based on financial need. The Pell Grant is the largest federal student aid grant. For many students, these grants provide a foundation of financial aid, to which aid from other sources may be added. Pell Grants may be used to pay for tuition, books, and indirect educational expenses. Pell Grants do not have to be paid back.

Monetary Award Program

The Illinois Monetary Award Program (MAP) is a need-based, state-funded program designed to assist undergraduate college students. The Monetary Award Program pays a portion of in-district tuition charges. Monetary award amounts vary depending on the student's demonstrated financial need and state funding. MAP funds do not have to be paid back.

Alternative Application for Illinois Financial Aid

The Retention of Illinois Students and Equity (RISE) Act, which went into effect on Jan. 1, 2020, allows eligible undocumented students to apply for all forms of state financial aid. The Alternative Application for Illinois Financial Aid (Alternative Application) provides a way for these qualified students to apply for Monetary Award Program (MAP) grants, the state's largest need-based grant program for low-income college students.

The Illinois Student Assistance Commission (ISAC) has developed the Alternative Application for Illinois Financial Aid to provide a pathway for students who meet the provisions of the RISE Act to apply for the Monetary Award Program (MAP) for the 2020-21 award year. The Alternative Application collects much of the same data as the Free Application for Federal Student Aid (FAFSA) but is administered by ISAC. An application and additional resources can be found at

studentportal.isac.org/alternativeapp (<https://studentportal.isac.org/alternativeapp/>).

Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG is awarded to undergraduate college students to help pay for educational expenses. Students can receive up to \$1,600 a year with priority given to students with exceptional financial need who receive the Pell Grant. The FSEOG awards are based on the availability of FSEOG funds and do not need to be repaid.

Federal Work-Study

Federal Work-Study provides part-time jobs for students with financial need, allowing them to earn money to help pay education expenses. Most of these jobs are on campus, but some opportunities are also available with local non-profit agencies. For more information, connect with financial aid or go to <http://cod.edu/about/humanresources/index.aspx> and open the Student Employment link.

Student Loans

The Federal Direct Loan Program offers low-interest, long-term educational loans to eligible students. Loan funds provided by the U.S. Department of Education to the student, through the school, must be repaid, including origination fees and interest. An eligible student must complete the Free Application for Federal Student Aid (FAFSA) and be enrolled at least half time in an eligible program of study. There are annual limits on the amounts that may be borrowed, which vary by the student's academic level in school and the student's dependent or independent status. Repayment begins six months after the student ceases to be enrolled at least half time with options to delay payment available. There are two types of federal student loans.

Federal Direct Subsidized Student Loan: Eligible undergraduate students with financial need can qualify for a subsidized loan. The government pays the interest on the loan while the student remains enrolled at least half time and during specific periods when the government allows deferment of repayment.

Federal Direct Unsubsidized Student Loan: Eligible students, regardless of need, qualify for an unsubsidized loan, provided they have filed the FAFSA. Interest accrual begins immediately, and the student can choose to pay the interest while enrolled or upon entering repayment.

Annual Loan Limits

The Federal Direct loan program limits the combination of both subsidized and unsubsidized loans. Maximum loan eligibility depends upon actual enrollment and other aid received; therefore, a student's loan eligibility may be less than the maximum available.

Academic Level	Combined Subsidized and Unsubsidized Loan Limits
Freshman	\$5,500
Sophomore	\$6,500

Independent Undergraduate Students

Academic Level	Subsidized Loan Limits	Additional Unsubsidized Loan Limits	Combined Subsidized and Unsubsidized Loan Limits
Freshman	\$3,500	\$6,000	\$9,500
Sophomore	\$4,500	\$6,000	\$10,500

* Maximum loan eligibility depends upon actual enrollment and other aid received; therefore, a student's loan eligibility may be less than the maximum.

Parent Loans

Federal Direct Parent PLUS Loans (PLUS) are long-term educational loans provided by the federal government for qualified individuals. Natural and adoptive parents (and stepparents, if included on the FAFSA) with no adverse credit history are eligible to borrow on behalf of an eligible dependent undergraduate student. On behalf of each student, the maximum loan amount a parent may borrow per academic year cannot exceed the cost of attendance minus any financial aid received. A PLUS borrower is obligated to repay the full amount borrowed, including origination fees and interest. The repayment period begins on the date the loan is fully disbursed; however, there is a deferment option. Loan programs are governed by federal regulations and are subject to change. For information on interest rates and origination fees, visit studentaid.gov (<http://studentaid.gov>).

Scholarships

Scholarships give students the opportunity to complete their education without having to incur student loan debt. Scholarship eligibility varies as do the amount of each scholarship. Scholarships can be based on academic achievement, financial need, field of study and population.

Students are strongly encouraged to apply for scholarships through College of DuPage or outside resources. The more scholarships and grants you receive, the less loan money you may need to borrow to pay for your college experience. Visit us online at cod.edu/costs/scholarships/ for more deadline dates and scholarship applications.

Veterans, Dependents and Military Personnel Educational Benefits

The most common Veteran and Military Educational Benefits accepted at College of DuPage include but are not limited to:

Federal Benefits

- Montgomery G.I. Bill® – Chapter 30
- Veterans Vocational Rehabilitation - Chapter 31
- Post 9/11 Bill – Chapter 33
- Survivors and Dependent Educational Assistance – Chapter 35
- Montgomery G.I. Bill® Selected Reserve – Chapter 1606
- Reserve Officers' Training Corps (ROTC)
- Military Tuition Assistance
- My Career Advancement Account Scholarship (MyCAA) for spouses of military members

State Benefits

- Illinois Veterans Grant
- Army and Air Force Reserve Officers' Training Corps (ROTC)

- Illinois National Guard Grant
- MIA-POW Scholarship

Apply for federally funded benefits through the Department of Veterans Affairs: (888) 442-4551 | www.gibill.va.gov (<http://www.gibill.va.gov>)

Apply for state benefits through the Illinois Department of Veterans Affairs: (800) 437-9824 | www2.illinois.gov/veterans (<http://www2.illinois.gov/veterans/>) or Illinois State Assistance Commission (800) 899-4722 www.isac.org/students (<http://www.isac.org/students/>)

For questions on any military program, contact Veterans Services at (630) 942-3814 or visit cod.edu/veterans (<https://cod.edu/veterans/>).

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at www.benefits.va.gov/gibill (<http://www.benefits.va.gov/gibill/>).

Compliance with 38 USC 3679(e) VA Pending Payment Compliance

Beginning August 1, 2019, and despite any policy to the contrary, the College of DuPage will not take any of the four following actions toward any student using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while their payment from the United States Department of Veterans Affairs is pending to the educational institution:

- Prevent their enrollment;
- Assess a late penalty fee to;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students may be required to:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

EDUCATIONAL OPPORTUNITIES

Degrees

Seven degrees are granted by College of DuPage:

1. The Associate in Arts degree represents the first two years of study for students who plan to pursue a Bachelor of Arts degree.
2. The Associate in Science degree represents the first two years of study for students who plan to pursue a Bachelor of Science degree.
3. The Associate in Engineering Science degree is intended for students who wish to prepare for transfer to a baccalaureate-granting school in the field of engineering.
4. The Associate in Applied Science degree represents the completion of study in a career and technical education program. Students earning this degree may seek employment following graduation or transfer to a baccalaureate-granting college or university that has articulation agreements with College of DuPage for these programs.
5. The Associate in General Studies degree is designed for students who desire to arrange a program of courses to meet their personal interests.
6. The Associate in Fine Arts degree in Art is intended for students who wish to prepare for transfer to a baccalaureate-granting school with a Bachelor in Fine Arts program.
7. The Associate in Fine Arts degree in Music is intended for students who wish to prepare for transfer to a baccalaureate-granting school with a Bachelor in Music program.

Degrees are awarded at the close of each semester. However, when a student completes all requirements for a degree, the completion date is recorded on the student's permanent record. The requirements for each degree are recommended by the faculty and approved by the president of the College.

Graduation Requirements for All Associates Degrees

Students are subject to the degree requirements that are in effect during the academic year in which they originally enroll, as well as subsequent applicable changes. Some state certification programs may require students to be subject to the most current requirements. It is the responsibility of the student to verify the appropriate degree requirements with a counselor or advisor and the Office of Student Records. Current degree information is also available at [cod.edu/programs/degree_programs.aspx](https://www.cod.edu/academics/programs/degree_programs.aspx) (https://www.cod.edu/academics/programs/degree_programs.aspx).

Each candidate for a degree shall:

1. Complete the minimum required number of credits in courses numbered 1000 or above (or equivalent) as specified for each degree. The Associate in Arts, Associate in Science, and Associate in General Studies require a minimum of 60 credit hours. The Associate in Engineering Science degree requires a minimum of 68 credit hours. The Associate in Fine Arts-Music degree requires a minimum of 64 credit hours. The Associate in Fine Arts-Art degree requires a minimum of 61 credit hours.
2. Possess a minimum 2.00 ("C") average in both College of DuPage coursework and the combined grade point average of all College of

DuPage courses numbered 1000 and above and all courses accepted for transfer from other institutions.

3. Complete a minimum of 20 applicable credits toward a degree at College of DuPage.
4. File an Application for Degree or Certificate completion no sooner than one semester before the anticipated completion date. Run a degree audit online to check the progress towards a degree.
5. Satisfy all financial obligations and other specific requirements.
6. Be in good academic standing at the time final credits for the degree are earned.

Note: Students are subject to degree requirements as stated in the College of DuPage Catalog current at the time of original enrollment, as well as subsequent applicable changes, unless enrollment has been broken for more than three consecutive semesters, including summer semester. When enrollment has been broken for more than three consecutive semesters, the student is subject to degree requirements stated in the College of DuPage Catalog current at the time of re-enrollment.

The College reserves the right to award a degree or certificate to eligible students who have completed all requirements, regardless of application.

Certificate Requirements

Each candidate for a certificate shall:

1. Possess a minimum of 2.00 ("C") average in both College of DuPage coursework and the combined grade point average of all College of DuPage courses numbered 1000 and above and all courses accepted for transfer from other institutions.
2. Complete a minimum of one-half the applicable credits at College of DuPage.
3. File an Application for Degree or Certificate no sooner than one semester before the anticipated completion date. Run a degree audit online to check the progress towards a certificate.
4. Satisfy all financial obligations and other specific requirements.
5. Be in good academic standing at the time final credit for the certificate is earned.

Note: Students are subject to certificate requirements as stated in the College of DuPage Catalog current at the time of original enrollment, as well as subsequent applicable changes, unless enrollment has been broken for more than three consecutive semesters, including summer semester. When enrollment has been broken for more than three consecutive semesters, the student is subject to certificate requirements stated in the College of DuPage Catalog current at the time of re-enrollment.

College-Wide Student Learning Outcomes

In 2025, College of DuPage faculty approved these College-Wide Student Learning Outcomes, which ensure graduates acquire a well-rounded education that prepares them for success in both their professional and personal lives. These outcomes reflect COD's commitment to developing well-informed, capable graduates who can think critically, communicate effectively, and engage responsibly in an interconnected world.

At the completion of any degree program, COD graduates will meet each of the seven (7) outcome categories below using *one or more* of the listed methods.

Critical Thinking

- Apply appropriate strategies to solve real-world or discipline-specific problems.
- Develop logical, informed, evidence-based conclusions.
- Evaluate assumptions, arguments, or conclusions

Cultural and Historical Comprehension

- Examine a variety of cultural perspectives, ideas, or artifacts.
- Demonstrate awareness of historical events and ideas.
- Participate in respectful discourse on a variety of perspectives rooted in human experience.

Expression and Exchange of Ideas

- Integrate modes of communication such as text, speech, image, audio, video or a combination of these, as best suited to context.
- Apply strategies to achieve the author's purpose(s).
- Demonstrate an understanding of audience.

Human Behavior and Societal Impact

- Apply appropriate strategies to solve real-world or discipline-specific problems.
- Develop logical, informed, evidence-based conclusions.
- Evaluate assumptions, arguments, or conclusions

Information Literacy

- Locate information efficiently using a variety of search tools.
- Evaluate information and its sources critically and in context of an information need.
- Employ information effectively, ethically, and legally to accomplish a specific purpose.

Quantitative Reasoning

- Solve mathematical problems.
- Evaluate solutions to mathematical problems to determine the reasonableness of conclusions.
- Interpret quantitative data, such as graphs and results of analyses.

Scientific Reasoning

- Develop a scientific hypothesis based on observations.
- Employ appropriate scientific procedures to collect data.
- Evaluate the validity of conclusions drawn from scientific data.

General Education Categories

For the Associate in Applied Science and Associate in General Studies degrees, general education and elective courses are organized under the following categories of general education. Electives for the A.A.S. degree vary, depending on the program. Check with a counselor or advisor for a list of electives.

Any course, 1000-level or higher, can be taken as an elective for the A.G.S. degree.

Communication

Communication includes studies in English and Speech. These disciplines provide an educational framework within which students may develop their abilities to think independently and to express themselves clearly, effectively, and creatively. Instructors focus on the skills of

communication and the contexts in which human expression occurs. Educational opportunities are provided that:

- develop, through practice, the student's abilities in observing, listening, reading, speaking, and writing effectively.
- develop the student's skills in obtaining, interpreting, and evaluating information and ideas.
- encourage the student's creative expression.
- enhance the student's awareness of and respect for personal, social, and cultural diversity.
- allow for the student's exploration of various methods and technologies in communication.

Code	Title	Credits
ENGLI 1101	English Composition I	3
ENGLI 1102	English Composition II	3
ENGLI 1105	Workplace Writing	3
SPEEC 1100	Fundamentals of Speech Communication	3
SPEEC 1120	Small-Group Communication	3
SPEEC 1150	Introduction to Business Communication	3

Physical/Life Sciences¹

Physics, Chemistry, and Earth Science deal with natural laws and theories and their application to human needs. Universal phenomena are studied and analyzed. The Life Sciences (Biology, Botany, Anatomy & Physiology, Microbiology, and Zoology) examine the components of the living world and their interactions with the physical and chemical world.

- Anatomy and Physiology
- Biology
- Botany
- Chemistry
- Earth Science
- Microbiology
- Physics
- Zoology

¹ Course selection must include at least one course with a laboratory component.

Mathematics

Mathematics provides the tools and skills to organize our thoughts and apply problem-solving techniques. The study of mathematics helps students understand the quantitative relationships found in business, technology, and the physical, natural, and social sciences.

Select mathematics course(s) consistent with specific and general degree requirements. Includes PSYCH 2280 Statistics/Social & Behavioral Sciences and SOCIO 2205 Statistics for the Social and Behavioral Sciences.

Humanities/Fine Arts

Humanities and Fine Arts include subject areas that address the meaning of being human. They provide the student with a basis for value judgment and a context for thoughtful action. The study of the humanities frees the student to think beyond personal and cultural limitations, to relate present experiences to human traditions, and to consider and choose constructive action in the present and for the future.

Courses in Humanities and Fine Arts are designed to:

- develop the student's skills in study, analysis, synthesis, and evaluation.
- provide the student the opportunity to develop original ideas and to create works of art.
- develop the student's understanding of history, philosophy, and the fine and performing arts.
- develop the student's awareness of the nature of being human, social issues, and spiritual aspirations.
- develop the student's insight into various cultures through the study of the arts, literature, history, and foreign languages.
- develop, through study and participation, the student's insight and abilities in the visual and performing arts.
- provide the framework for an understanding of cultural, political, and intellectual heritage.

The subject areas include Foreign Languages (Arabic, Chinese, French, German, Spanish, etc.), certain English and History courses, Humanities, Philosophies, Religious Studies, Art, Theater, and Music.

- Arabic
- Art
- Chinese
- English except for the following:

Code	Title	Credits
ENGLI 1101	English Composition I	3
ENGLI 1102	English Composition II	3
ENGLI 1105	Workplace Writing	3
ENGLI 1110	Technical Writing	3
ENGLI 1115	Digital Writing	3
ENGLI 2100	Writing Center Theory and Practice	3

- French
- German
- History except for the following:

Code	Title	Credits
HISTO 1130	History of the United States to 1865	3
HISTO 1140	History of the United States Since 1865	3
HISTO 2210	History and Culture of Africa	3
HISTO 2215	History and Culture of South Asia	3
HISTO 2242	African-American History	3
HISTO 2260	United States History Since 1945	3

- Humanities
- Italian
- Japanese
- Korean
- Motion Picture/Television

Code	Title	Credits
MPTV 1135	Introduction to Film Art	3
MPTV 1145	Film History	3
MPTV 1154	Film As Literature	3
MPTV 2234	Film Directors and Authorship	3
MPTV 2235	Film Genres	3

MPTV 2236	World Cinema	3
MPTV 2237	Documentary Cinema	3
MPTV 2238	Longform Television	3

- Music
- Philosophy
- Religious Studies
- Russian
- Spanish
- Speech

Code	Title	Credits
SPEEC 1110	Oral Interpretation	3
SPEEC 2210	Readers' Theater (Group Performance of Literature)	3

- Theater

Social and Behavioral Sciences

Social and Behavioral Sciences courses provide students with a broad perspective on human behavior, our cultural heritage, our relationships with others, our social institutions, and the environment. The subject areas include Anthropology, Economics, Geography, History, Political Science, Psychology, Social Science, and Sociology.

- Anthropology
- Economics (except ECONO 1110 Consumer Economics and Personal Finance)
- Education

Code	Title	Credits
EDUCA 1100	Introduction to Education	3
EDUCA 1101	School Procedure	3

- Geography
- History

Code	Title	Credits
HISTO 1130	History of the United States to 1865	3
HISTO 1140	History of the United States Since 1865	3
HISTO 2210	History and Culture of Africa	3
HISTO 2215	History and Culture of South Asia	3
HISTO 2242	African-American History	3
HISTO 2260	United States History Since 1945	3

- Political Science
- Psychology (except PSYCH 1140 Human Sexuality and PSYCH 2280 Statistics/Social & Behavioral Sciences)
- Social Science
- Sociology (except SOCIO 2205 Statistics for the Social and Behavioral Sciences and SOCIO 2290 Sociology of Communication & Media)

Human Relations

The Human Relations category has been designed in accordance with the requirements of Illinois Public Act 87-581 to include coursework on improving human relations with an emphasis on issues of race, ethnicity, gender, and other concerns related to improving human relations. Courses also may focus on non-Western and American diversity.

• Anthropology

Code	Title	Credits
ANTHR 1000	Introduction to Anthropology	3
ANTHR 1100	Cultural Anthropology	3
ANTHR 1105	Practical Anthropology	3
ANTHR 1130	People and Cultures of the World	3

• ART 1100 Introduction to Visual Art and Culture

• College Skills

Code	Title	Credits
COLLG 1105	Career Development	2
COLLG 1110	Interpersonal Skills for Life and Work	2

• CRIMJ 2150 Multiculturalism and Diversity

• DANCE 1100 Dance Appreciation

• EDUCA 1101 School Procedure

• English

Code	Title	Credits
ENGLI 1160	Native American Literature	3
ENGLI 1161	Multicultural Literatures of the U.S.	3
ENGLI 1165	Literature, Gender, and Sexualities	3

• GEOGR 1130 Cultural Geography

• History

Code	Title	Credits
HISTO 2200	Middle East History Since 1500	3
HISTO 2237	History of Terrorism	3
HISTO 2242	African-American History	3
HISTO 2267	Native American History	3

• Human Services

Code	Title	Credits
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1121	Cross-Cultural Communications	3

• HUMNT 1110 The Arts and Cultural Diversity

• MANAG 2220 Organizational Behavior

• OFTI 2600 Professional Development

• Philosophy

Code	Title	Credits
PHILO 1110	Ethics	3
PHILO 1112	Biomedical Ethics	3
PHILO 1114	Business Ethics	3
PHILO 2010	Ancient Philosophy	3
PHILO 2011	Early Modern Philosophy	3

• POLS 2230 Introduction to Peace and Conflict Studies

• Psychology

Code	Title	Credits
PSYCH 1150	Adjustment	3
PSYCH 2235	Developmental Psychology: Adulthood	3
PSYCH 2240	Social Psychology	3

• Sociology

Code	Title	Credits
SOCIO 1100	Introduction to Sociology	3
SOCIO 1120	Sociology of Sex, Gender and Power	3
SOCIO 2215	Race and Racism in America	3
SOCIO 2290	Sociology of Communication & Media	3

• Spanish

Code	Title	Credits
SPANI 1100	Civilization and Culture of Spain	3
SPANI 1110	Latin American Culture & Civilization	3

• Speech

Code	Title	Credits
SPEEC 1120	Small-Group Communication	3
SPEEC 2200	Intercultural Communication	3

Global/Multicultural Studies

The College of DuPage faculty has made an educational commitment to international/intercultural studies. The purpose of this category is to enhance student capacity to:

- conceptualize and understand the complexity of an international system (economics, government, politics, etc.).
- understand world cultures and international events.
- appreciate the diversity as well as commonality of human values, beliefs, and behaviors.
- understand and apply the principles of intercultural communication.
- broaden student perspective by exposure to a culture different from the student's own.

This list of courses is subject to change at the beginning of each fall semester. Check with the Counseling and Advising Center for an updated educational plan at cod.edu/counseling/student_planning.aspx (https://www.cod.edu/counseling/student_planning.aspx).

• Anthropology

Code	Title	Credits
ANTHR 1000	Introduction to Anthropology	3
ANTHR 1100	Cultural Anthropology	3
ANTHR 1105	Practical Anthropology	3
ANTHR 1110	Business Anthropology	3
ANTHR 1130	People and Cultures of the World	3
ANTHR 1400	Race, Sex and Human Evolution	3

• Arabic

Code	Title	Credits
ARABI 1101	Elementary Arabic I	4
ARABI 1102	Elementary Arabic II	4

• Art

Code	Title	Credits
ART 1100	Introduction to Visual Art and Culture	3
ART 2211	Art Histories Before 1400 CE	3
ART 2212	Art Histories 1400 to 1950	3

ART 2213	Art Histories Since 1950	3
ART 2214	Non-Western Art	3

- BUSIN 2255 International Business

- Chinese

Code	Title	Credits
CHINE 1100	Civilization and Culture of China	3
CHINE 1101	Elementary Chinese I	4
CHINE 1102	Elementary Chinese II	4
CHINE 2201	Intermediate Chinese I	4
CHINE 2202	Intermediate Chinese II	4

- CRIMJ 2150 Multiculturalism and Diversity

- English

Code	Title	Credits
ENGLI 1160	Native American Literature	3
ENGLI 1161	Multicultural Literatures of the U.S.	3
ENGLI 2221	British Literature From 1800 Through The Present	3
ENGLI 2226	World Literature	3
ENGLI 2227	Modern European Literature	3
ENGLI 2262	Non-Western Literature	3

- French

Code	Title	Credits
FRENC 1100	Civilization and Culture of France	3
FRENC 1101	Elementary French I	4
FRENC 1102	Elementary French II	4
FRENC 2201	Intermediate French I	4
FRENC 2202	Intermediate French II	4
FRENC 2251	Conversation and Composition I	3
FRENC 2252	Conversation and Composition II	3

- Geography

Code	Title	Credits
GEOGR 1100	Western World Geography	3
GEOGR 1105	Eastern World Geography	3
GEOGR 1120	Economic Geography	3
GEOGR 2204	Russia	3
GEOGR 2235	The Middle East	3

- German

Code	Title	Credits
GERMA 1100	German Civilization and Culture	3
GERMA 1101	Elementary German I	4
GERMA 1102	Elementary German II	4
GERMA 2201	Intermediate German I	4
GERMA 2202	Intermediate German II	4
GERMA 2251	Conversation and Composition I	3
GERMA 2252	Conversation and Composition II	3

- History

Code	Title	Credits
HISTO 2200	Middle East History Since 1500	3
HISTO 2205	History of Asia	3
HISTO 2210	History and Culture of Africa	3
HISTO 2215	History and Culture of South Asia	3
HISTO 2220	History and Culture of China	3
HISTO 2225	History and Culture of Russia	3
HISTO 2230	History and Culture of Japan	3
HISTO 2235	20th Century World History	3
HISTO 2237	History of Terrorism	3
HISTO 2240	History and Culture of Latin America	3
HISTO 2242	African-American History	3
HISTO 2267	Native American History	3

- HUMAN 1121 Cross-Cultural Communications

- HUMNT 1105 Humanities Beyond the U.S. & Europe

- Italian

Code	Title	Credits
ITALI 1100	Civilization and Culture of Italy	3
ITALI 1101	Elementary Italian I	4
ITALI 1102	Elementary Italian II	4
ITALI 2201	Intermediate Italian I	4
ITALI 2202	Intermediate Italian II	4
ITALI 2251	Conversation and Composition I	3
ITALI 2252	Conversation and Composition II	3

- Japanese

Code	Title	Credits
JAPAN 1100	Japanese Civilization and Culture	3
JAPAN 1101	Elementary Japanese I	4
JAPAN 1102	Elementary Japanese II	4
JAPAN 2201	Intermediate Japanese I	4
JAPAN 2202	Intermediate Japanese II	4
JAPAN 2251	Conversation and Composition I	3
JAPAN 2252	Conversation and Composition II	3

- Korean

Code	Title	Credits
KOREA 1101	Elementary Korean I	4
KOREA 1102	Elementary Korean II	4
KOREA 2201	Intermediate Korean I	4
KOREA 2202	Intermediate Korean II	4

- MCOMM 1120 Introduction to Broadcasting in a Global Environment

- Music

Code	Title	Credits
MUSIC 1104	Introduction to American Music	3
MUSIC 1115	Introduction to World Music	3

• Philosophy

Code	Title	Credits
PHILO 1110	Ethics	3
PHILO 1116	Environmental Ethics	3
PHILO 1150	World Religions	3

• Political Science

Code	Title	Credits
POLS 2203	Comparative Politics	3
POLS 2220	World Politics	3
POLS 2221	Politics of the Middle East	3

• Religious Studies

Code	Title	Credits
RELIG 1100	Introduction to Religion	3
RELIG 1150	World Religions	3
RELIG 2155	Asian Thought	3
RELIG 2160	Judaism, Christianity and Islam	3

• Russian

Code	Title	Credits
RUSSI 1101	Elementary Russian I	4
RUSSI 1102	Elementary Russian II	4
RUSSI 2201	Intermediate Russian I	4
RUSSI 2202	Intermediate Russian II	4

• Sociology

Code	Title	Credits
SOCIO 2210	Social Problems	3
SOCIO 2220	Sexual Relationships, Marriage & Family	3

• Spanish

Code	Title	Credits
SPANI 1100	Civilization and Culture of Spain	3
SPANI 1101	Elementary Spanish I	4
SPANI 1102	Elementary Spanish II	4
SPANI 1110	Latin American Culture & Civilization	3
SPANI 2201	Intermediate Spanish I	4
SPANI 2202	Intermediate Spanish II	4
SPANI 2251	Conversation and Composition I	3
SPANI 2252	Conversation and Composition II	3

• Accounting

Code	Title	Credits
ACCOU 1110	Accounting Procedures	3
ACCOU 2140	Financial Accounting	4

• Architecture

Code	Title	Credits
ARCH 1100	Introduction to Architecture	3
ARCH 1121	Architectural Design Communication	4

• Art

Code	Title	Credits
ART 1101	Drawing I	3
ART 1105	Introduction to Studio Art	3
ART 1140	Introduction to Ceramics	3
ART 1151	Two-Dimensional Foundations Studio	3

• Automotive Technology

Code	Title	Credits
AUTO 1040	Automotive for Non-Majors	3
AUTO 1110	Engine Design and Operation	3

• BUSIN 1100 Introduction to Business

• Computer and Information Technology

Code	Title	Credits
CIT 1100	IT Fundamentals	3
CIT 1121	Introduction to Networks	3

• College Skills

Code	Title	Credits
COLLG 1105	Career Development	2
COLLG 1110	Interpersonal Skills for Life and Work	2
COLLG 1115	College Success Skills	2

• Computer and Information Science

Code	Title	Credits
CIS 1110	Introduction to Informatics	2
CIS 1120	The Internet	2
CIS 1130	Windows Basics	2
CIS 1150	Understand Computers/Information/Systems	3
CIS 1400	Programming Logic and Technique	4

• Criminal and Justice Studies

Code	Title	Credits
CRIMJ 1100	Introduction to Criminal Justice	3
CRIMJ 2150	Multiculturalism and Diversity	3

• CULIN 1110 Basic Nutrition

• ECEC 1110 Parenting and the Young Child

• ECONO 1110 Consumer Economics and Personal Finance

• Education

Contemporary Life Skills

Courses in this category are intended to help students use creative expression, problem solving, interpersonal communication, health and body, computers/technology, and personal development to function in a changing, technological, and complex society.

This list of courses is subject to change at the beginning of each fall semester. Check with the Counseling and Advising Center for an updated educational plan.

Code	Title	Credits
EDUCA 1100	Introduction to Education	3
EDUCA 2201	Education for Exceptional Children	3

• Electro-Mechanical Technology

Code	Title	Credits
ELMEC 1101	Survey of Automation	3
ELMEC 1120	Residential Wiring	3
ELMEC 1130	Industrial Electricity	3

• English

Code	Title	Credits
ENGLI 2250	Introduction to Creative Writing	3
ENGLI 2251	Fiction Writing	3
ENGLI 2252	Poetry Writing	3
ENGLI 2253	Creative Nonfiction Writing	3
ENGLI 2261	Writing for Publication	3

• Fashion Studies

Code	Title	Credits
FASHI 1200	Beginning Clothing Construction	3
FASHI 1201	Clothing Construction I	3

- FIRE 1150 CPR-Basic Life Support-Healthcare Prvdr
- GRDSN 1102 Graphic Design 1
- HLTHS 1110 Biomedical Terminology
- HVACR 1110 Introduction to Electricity and Hvacr Controls
- HORT 1100 Introduction to Horticulture
- HOSP 1102 Introduction to World Destinations
- Human Services

Code	Title	Credits
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1125	Introduction to Addictions	3
HUMAN 2240	Family Education and Treatment Models	3

- INTER 1150 History of Interior Design
- LIBRA 1101 Intro to Libraries & the Information Age
- Manufacturing Technology

Code	Title	Credits
MANUF 1180	Quality Control	3
MANUF 2280	Industrial Safety	2

• Mass Communication

Code	Title	Credits
MCOMM 1100	Introduction to Mass Communication	3
MCOMM 1105	News Reporting & Writing for Multimedia	3

• Mathematics

Code	Title	Credits
MATH 1100	Business Mathematics	3
MATH 1220	Quantitative Literacy	3

• Motion Picture/Television

Code	Title	Credits
MPTV 1011	Introduction to Motion Picture and Television	3
MPTV 1020	Editing for Motion Pictures and Television	3
MPTV 1220	Introduction to Television Studio Production	3

• Office Technology Information

Code	Title	Credits
OFTI 1100	Keyboarding and Document Fundamentals	3
OFTI 1200	Microsoft 365 for Business Professionals	3
OFTI 1210	Word Processing I	3

• PHOTO 1100 Fundamentals of Photography

- PHYS 1101 Fitness Conditioning I to PHYS 1922 Power Yoga II, except for the following:

Code	Title	Credits
PHYS 1800	Special Project	1-3
PHYS 1820	Selected Topics	0.5-3
PHYS 1840	Independent Study	1-4
PHYS 2244	Lifeguard Training	2
PHYS 2251	Living With Health	3
PHYS 2254	Advanced First Aid, CPR and AED	3

• Psychology

Code	Title	Credits
PSYCH 1140	Human Sexuality	3
PSYCH 1150	Adjustment	3

• Sociology

Code	Title	Credits
SOCIO 1205	Introduction to Data Science	3
SOCIO 2200	Introduction to Research Methods	3
SOCIO 2290	Sociology of Communication & Media	3

• Speech

Code	Title	Credits
SPEEC 1110	Oral Interpretation	3
SPEEC 1120	Small-Group Communication	3
SPEEC 1160	Interpersonal Communication	3
SPEEC 2210	Readers' Theater (Group Performance of Literature)	3

• Theater

Code	Title	Credits
THEAT 1105	Improvational Acting	3
THEAT 1111	Acting I	3
THEAT 2230	Play Directing	3

- Any discipline's internship courses

Electives

Associate in Arts and Associate in Science Degrees

In addition to the courses specified as part of the General Education Core Curriculum, students may select electives from the following areas. Students may select electives from any discipline at the College. This may include up to 10 credit hours in career and technical courses selected from the areas below. Students are strongly advised to consult with a counselor or advisor and/or a transfer institution in selecting elective courses.

- Accounting

Code	Title	Credits
ACCOU 2140	Financial Accounting	4
ACCOU 2150	Managerial Accounting	4
ACCOU 2205	Federal Taxation I	4
ACCOU 2206	Federal Taxation II	4
ACCOU 2241	Intermediate Accounting I	4
ACCOU 2242	Intermediate Accounting II	4
ACCOU 2251	Cost Accounting	3
ACCOU 2870	Internship (Transfer)	1-4

- Anatomy and Physiology
- Anthropology
- Art
- Biology (except BIOL 2871 Internship - Advanced (Transfer))
- Botany
- Business

Code	Title	Credits
BUSIN 1100	Introduction to Business	3
BUSIN 1800	Special Project	1-4
BUSIN 1840	Independent Study	1-3
BUSIN 2210	Principles of Finance	3
BUSIN 2255	International Business	3
BUSIN 2800	Special Project	1-4
BUSIN 2870	Internship (Transfer)	1-4
BUSIN 2871	Internship - Advanced (Transfer)	1-4

- Business Law

Code	Title	Credits
BUSLW 1840	Independent Study	1-4
BUSLW 2205	Legal Environment of Business	3
BUSLW 2211	Business Law I	3
BUSLW 2212	Business Law II	3

- Chemistry
- Criminal and Justice Studies

Code	Title	Credits
CRIMJ 1100	Introduction to Criminal Justice	3
CRIMJ 1151	Constitutional Law	3
CRIMJ 1152	Criminal Law	3
CRIMJ 2150	Multiculturalism and Diversity	3

CRIMJ 2231	Criminology	3
CRIMJ 2240	Juvenile Delinquency	3

- CULIN 1110 Basic Nutrition
- DANCE 1100 Dance Appreciation
- Early Childhood Education and Care

Code	Title	Credits
ECEC 1101	Growth & Development of the Young Child	3
ECEC 2870	Internship (Transfer)	1-4

- Earth Science
- Economics
- Education
- Engineering
- English (except ENGL 2863 Internship (Career & Technical Ed))
- FASHI 1116 Weaving II
- Foreign Languages: Arabic, Chinese (except CHINE 1800 Special Project), French, German, Italian, Japanese, Korean, Russian, Spanish
- Geography
- History (except HIST 2270 History of Chicago)
- Humanities
- INTER 2870 Internship (Transfer)
- Mass Communication

- Mathematics except for the following:

Code	Title	Credits
MATH 1100	Business Mathematics	3
MATH 1102	Mathematics for Health Sciences	3
MATH 1104	Mathematics for Horticulture	3
MATH 1115	Technical Mathematics I	3
MATH 1116	Technical Mathematics II	5

- Microbiology
- Motion Picture/Television

Code	Title	Credits
MPTV 1111	Film/Video Aesthetics	3
MPTV 2022	Screenwriting for Short Forms	3

- Music
- Philosophy
- PHOTO 1105 History of Photography
- Physical Education (except PHYS 2863)
- Physics except for the following:

Code	Title	Credits
PHYSI 1800	Special Project	1-3
PHYSI 2800	Special Project	1-3

- Political Science
- Psychology
- Religious Studies
- Social Science
- Sociology
- Speech (except SPEEC 1140 Public Relations)

- Theater
- Zoology

Reminders

1. When a student breaks enrollment for more than three consecutive semesters, including summer semester, the student is subject to the degree requirements as stated in the College of DuPage Catalog that is current at the time of re-entry, subject to changes.
2. Courses numbered below 1000 represent courses not usually found in the curriculum of a baccalaureate degree-granting institution and therefore may not transfer. They do not apply to any College of DuPage degree or certificate.
3. Students are responsible for proper class registration each semester. Selecting courses relevant to future goal and degree requirements is the responsibility of the student.
4. Students should contact a counselor or advisor for advice regarding degree requirements, transfer requirements, and achievement of educational goals.
5. All students intending to transfer are encouraged to plan their programs according to the requirements of the transfer institution.
6. Degree and major requirements at baccalaureate degree-granting institutions may require more than two academic years of study after completion of an associate degree at College of DuPage.
7. Some College of DuPage courses have been designed for two-year programs. Although they are considered college level, they may not meet the objectives of a bachelor's degree program and therefore may not be transferrable.

Eligibility for Awarding of a Second Degree

A student meeting specific qualifications may earn two or more different degrees from College of DuPage. Credits earned for degrees already completed may apply toward subsequent degrees. However, a minimum of 10 additional institutional credits must be earned at College of DuPage for each degree sought after the first degree is awarded.

Career Clusters at College of DuPage

College of DuPage participates in the national initiative of Career Clusters, intended to help states and educational institutions organize their programs and career exploration activities around theme/skill/knowledge-based continuity concerns. This allows students to explore like-kind occupational/vocational and career possibilities with a focus on opportunities. The 16-Cluster format used by the U.S. Department of Education encompasses all 970-plus occupations.

Using the Career Clusters, College of DuPage offers direction to students who may not yet know what they want to do but have an idea of their academic strengths and interests. It allows students, prospective and current, along with the community at-large to see the similarity between different fields. It also focuses on promoting the seamless transition of coursework between areas of study and progression from high school to College of DuPage, and through College of DuPage to a college or university.

Agriculture, Food, and Natural Resources

- Horticulture
- Sustainable Landscapes
- Hospitality Management

- Pre-Veterinary
- Architecture and Construction Architecture
- Construction Management
- Heating, Air Conditioning, and Refrigeration

Arts, Audio/Video Technology, and Communication

- Art
- Fashion Merchandising and Design
- Graphic Design
- Interior Design
- Sustainable Interiors
- Motion Picture/Television
- Music
- Photography
- Theater
- English
- Mass Communication
- Technical Communication
- Speech Communication

Business Management and Administration

- Business
- Facility Management
- Management
- Office Technology Information
- Administrative Assistant
- Event Planner

Education and Training

- Humanities
- Library and Information Technology
- Physical Education Fitness Instructor
- Sports Performance Training
- Teacher Preparation
- Teaching Online Utilizing Technology
- Early Childhood Education and Care - Assistant Teacher

Finance

- Accounting

Government and Public Administration

- Political Science

Health Science

- Certified Nursing Assistant (CNA)
- Medical Assistant
- Non-Invasive EKG
- Pharmacy Technician
- Clinical Laboratory Science
- Phlebotomy
- Health Information Technology
- Long-Term Care Administration
- Practical Nursing (PN)
- Nursing (ADN) (Pre-BSN)

- Physical Therapist Assistant
- Pre-Physical Therapy
- Diagnostic Medical Imaging Nuclear Medicine
 - Computed Tomography
- Diagnostic Medical Imaging Radiography
 - Mammography
- Diagnostic Medical Imaging Sonography
 - Vascular Sonography
- Respiratory Care
- Surgical Technology
- Central Sterile Processing Distribution
- Speech Language Pathology Assistant
- Pre-Medicine
- Pre-Pharmacy
- Dental Hygiene
- Pre-Dentistry

Hospitality and Tourism

- Culinary Arts
- Hospitality Management
- Wine Appreciation and Knowledge
- Resort Management
- Travel, Tourism, and Event Planning

Human Services

- Cosmetology
- Early Childhood Education and Care
- Human Services
 - Corrections Counseling
 - Residential Child Care
 - Veterans Counseling
 - Developmental Disabilities
- Psychology
- Religious Studies
- Social Sciences
- Sociology

Information Technology

- Computer and Information Science
- Computer and Information Technology

Law, Public Safety, Corrections, and Services

- Criminal Justice
 - Homeland Security
 - Forensic Criminal Investigations
- Fire Science
 - Emergency Medical Technician
 - Paramedic
 - Emergency Management
- Paralegal Studies

Manufacturing

- Manufacturing Technology
 - Manufacturing Skills Standards

- Integrated Engineering Technology
- Welding

Marketing, Sales, and Service

- Fashion Merchandising and Design
- Marketing
- Fashion Apparel Production

Science, Technology, Engineering, and Mathematics

- Electro-Mechanical Technology
- Electronics Technology
- Integrated Engineering Technology
- Engineering
- Mathematics
- Biotechnology
- Biology
- Botany
- Chemistry
- Earth Science
- Physics
- Zoology

Assessment of Student Learning in Disciplines/Programs

Faculty in academic disciplines and career and technical education programs administer meaningful, action-oriented assessments of their curricular effectiveness through Student Outcomes Assessment Projects.

The type of assessment varies from one discipline/program to another and is reflective of its needs. For example, disciplines/programs with capstone courses may use a portfolio as their project, whereas those with large-enrollment introductory courses may use a common exam that is given across sections. Additionally, program accreditation bodies may have competency-based instruments that are used to assess student learning. Faculty review assessment results and then develop plans for curriculum updates, student learning, and program enhancements.

Placement Testing for Math, Reading, and Writing

Tests in the areas of reading, writing, math, and English Language Studies are available for students to determine the appropriate course placement and satisfy course prerequisites. Scores from placement tests are used to prepare an educational plan that will be relevant and meaningful for students as they work toward successful completion of their educational goals. For more information about placement testing, visit [cod.edu/testing](https://www.cod.edu/testing/) (<https://www.cod.edu/testing/>).

Reading Placement Testing

The Reading Placement Test is designed to assist students in determining their preparedness to read at a college level. Test scores will indicate a level of reading proficiency, which will be important for success in courses requiring a college-level reading ability. Students may be exempt from taking the Reading Placement test. For a complete list of exemptions, visit [cod.edu/testing](https://www.cod.edu/testing/) (<https://www.cod.edu/testing/>).

Writing Placement Testing

The Writing Placement Test is designed to assist students in determining their preparedness to write at a college level. Test scores will indicate a level of proficiency in the use of standard written English, which will be important for success in English Composition and all other courses requiring a college-level writing ability. Students may be exempt from taking the Writing Placement Test. For a complete list of exemptions, visit [cod.edu/testing](https://www.cod.edu/testing/) (<https://www.cod.edu/testing/>).

Mathematics Placement Testing

The Math Placement Test is designed to place students into an appropriate math course. Math prerequisites may be met using prior college coursework or a qualifying score on the Math Placement Test. Prerequisites are listed by individual course in the mathematics section of the College of DuPage Catalog. For further math advising, contact the STEM Division or the Tutoring and Academic Support Center-Math Assistance Area, (630)942-3339.

College Articulation and Transfer Opportunities

The College Articulation and Partnership Coordinator works with the Academic Divisions to develop Articulation Agreements and transfer guides to benefit College of DuPage students interested in transferring to colleges and universities to complete the requirements for a bachelor's degree. The number of courses and credits transferrable to receiving colleges and universities varies by academic discipline/program of study and institution. The College has Articulation Agreements with public and private colleges and universities in Illinois and other states. A 2+2 Articulation Agreement provides an opportunity for students to complete their first two years of study at College of DuPage before transferring as juniors to another college or university. A 3+1 Articulation Agreement allows students to complete the first three years of study at College of DuPage before transferring as seniors to institutions that award the bachelor's degree. Formal transfer guides identify courses by their official name and number and the specific college credit hours earned for transferring from College of DuPage to other institutions.

The transferability of College of DuPage courses is determined by the receiving college or university. Generally, College of DuPage courses numbered 1100 or above are accepted by other institutions when these courses are part of, or applicable to, a degree at that institution. College of DuPage is also a participant in the Illinois Articulation Initiative (IAI), a statewide agreement that allows the transfer between participating colleges and universities of selected general educational courses and lower-division major courses. For more information on IAI, check their website at www.itransfer.org (<http://www.itransfer.org>).

Students may pursue transfer opportunities on their own with bachelor's degree-granting institutions; however, following a formal transfer guide will provide a more efficient and effective transfer of credits earned at College of DuPage. Students planning to transfer their College of DuPage credits should:

1. Begin early to explore possible transfer institutions that meet their educational goals for a specific program of study.
2. Contact the transfer institution for detailed information regarding specific degree requirements, transfer student policies and procedures, and opportunities for special scholarships available for transfer students.

3. Confer with a College of DuPage Student Success Counselor or Program Advisor concerning transfer plans.

For more information on articulation agreements, transfer guides, and special partnerships with baccalaureate degree-granting institutions, check the College of DuPage transfer information website at cod.edu/transfer (<https://cod.edu/transfer/>) or contact College of DuPage's Counseling, Advising, and Transfer Services department at (630)942-2259.

Internships and Service Learning

Academic Internship Program

Internships at College of DuPage involve students participating in occupational work experience with onsite supervision. Learning objectives are developed by the student and faculty member, with approval of the employer, to provide appropriate work-based learning experiences. Students can earn college credit for working a minimum of 75 clock hours per semester credit hour up to a maximum of four credit hours. Students can enroll in Academic Credit up to two times, earning up to eight credit hours. The enrollment criteria for students to register for internship credit are the following:

- A 2.0 cumulative grade point average, and
- 12 semester credits earned in a related field of study.
- Students will work with Career Services staff to obtain approval of the internship by the Associate Dean from the academic discipline where the student is requesting to earn credit.

Upon successful completion of the course, a student is expected to demonstrate the following learning outcomes:

- Evidence of increased field of study proficiency;
- Applied academic theory to the world of work;
- Appropriate work skills, including communication, problem solving, decision making, teamwork, self-management, initiative, and technical skills.

Students will take the following steps when earning internship credit:

1. Meet with the Career Services Center to discuss the internship and credit process.
2. The student will be assigned to meet with a faculty member in the program/discipline where the student plans to earn college credit. This faculty member will guide the student through their internship experience.
3. Develop written learning goals under the leadership and direction of the faculty member and the employer supervising the internship.
4. In collaboration with the worksite supervisor, complete an initial assessment of student's skills.
5. Work toward accomplishment of the learning goals under direction of the employer supervisor and the faculty member guiding the internship.
6. Keep a log of workplace accomplishments and hours worked.
7. In cooperation with the employer supervisor, complete a final assessment of student skills.
8. The student will be evaluated by completion of the agreed upon learning goals established with the faculty member guiding the student, the assessments by the employer/workplace supervisor, and completion of required work hours.

Students who are interested in pursuing an academic internship should consult Career Services in the Student Services Center (SSC) 3258 or call (630)942-2230.

Service Learning

A COD Service Learning course incorporates volunteer service hours at a local non-for-profit community organization. The service site is a learning lab for application of course content and engages the student in civic and social responsibility. Service activities should meet identified community need(s) and the course instruction and assignments must include reflection of the service activities in such a way that broadens understanding of course content and civic responsibility.

For more information about Service Learning, call (630)942-2230 or email servicelearning@cod.edu.

High School Partnerships - Dual Credit and Dual Enrollment

Dual Credit is the result of a formal agreement with a high school that allows academically qualified high school students to enroll in college-level courses taught at the high school by a high school teacher qualified as a dual credit instructor by College of DuPage.

Upon successful course completion, students earn both college credit and high school credit. Dual Credit course offerings are coordinated with the high school through the Dual Credit/Dual Enrollment program.

Dual Enrollment (High School Cohort model) is an opportunity for academically qualified high school students to enroll in college-level courses taught at the high school by College of DuPage faculty. Upon successful course completion, students exclusively earn college credit.

For more information about these programs, visit [cod.edu/dual-credit](https://www.cod.edu/dual-credit) (<https://www.cod.edu/dual-credit/>) or call (630)942-2880.

Cooperative Agreements for Instructional Programs

Comprehensive Agreement Regarding the Expansion of Educational Resources (CAREER)

College of DuPage is a member of the Comprehensive Agreement Regarding the Expansion of Educational Resources (CAREER), an agreement that provides expanded educational services with other community colleges in Illinois. Members of the CAREER consortium offer in-district tuition rates for select career and technical programs. CAREER allows students from a participating institution to enroll in an approved program at another participating institution if the program is not available in their home district, and they will be charged in-district tuition. There is no chargeback to a student's home district. The process to apply for an Incoming or Outgoing Cooperative Agreement is explained below.

Participating Institutions

- Black Hawk College
- Carl Sandburg College
- College of DuPage
- College of Lake County
- Danville Community College
- Elgin Community College
- Heartland Community College
- Highland Community College

- Illinois Central College
- Illinois Eastern Community Colleges
- Illinois Valley Community College
- John A. Logan College
- John Wood Community College
- Joliet Junior College
- Kankakee Community College
- Kaskaskia College
- Kishwaukee College
- Lake Land College
- Lewis and Clark Community College
- McHenry County College
- Moraine Valley Community College
- Morton College
- Oakton Community College
- Parkland College
- Prairie State College
- Rend Lake College
- Richland Community College
- Rock Valley College
- Sauk Valley Community College
- Shawnee Community College
- South Suburban College
- Southeastern Community College
- Southwestern Illinois College
- Spoon River College
- Waubensee Community College
- William Rainey Harper College

Incoming Cooperative Agreements

Individuals who want to enroll in an Associate in Applied Science degree or certificate program not offered by their own community college may apply for a cooperative agreement at College of DuPage. The process begins with the student applying through their own community college at least 30 days prior to the beginning of the term for which they intend to enroll at College of DuPage. Cooperative agreements are available for community colleges within the State of Illinois. Most community college districts do not approve cooperative agreements for single courses, developmental courses, or non-credit courses. For information on applying for a cooperative agreement, contact the Office of Student Registration Services, Student Services Center (SSC) 2221, call (630)942-2377, or email registration@cod.edu.

Outgoing Cooperative Agreements

Students residing in College of DuPage District 502 who wish to enroll in an approved program not offered by College of DuPage may be eligible for a cooperative agreement to attend another community college in Illinois that offers that curriculum. A student approved for a cooperative agreement will be entitled to that college's in-district tuition rates (Board Policy 25-50). The process to apply for a cooperative agreement to attend another community college in Illinois must be filed 30 calendar days prior to the start of the term. Single courses, developmental courses, non-credit courses, and Associate in Arts or Associate in Science degrees do not qualify for cooperative agreements. For information on applying for a cooperative agreement, contact the Office of Student Registration Services, Student Services Center (SSC) 2221, call (630)942-2377, or email registration@cod.edu.

Learning for Life

Continuing Education/Extended Learning serves a diverse cross-section of District 502 residents through the Youth Academy, Adult Enrichment, Adult Education, Homeland Security Training Institute, and Business Solutions units. Continuing Education offerings begin at kindergarten and journey through every phase of life. The Youth Academy serves elementary, middle, and high school students; Business Solutions serves employees and employers with professional development and career training; and Adult Enrichment serves adults pursuing personal growth. Continuing Education seeks to connect the College to the larger community, introduce non-traditional students to expert faculty, support innovative teaching and learning, and enhance academic and career pathways through dynamic programs and services. Continuing Education brings value to community members of all ages, partnering with public and private sector organizations to positively contribute to regional economic development and the overall quality of life.

ASSOCIATE DEGREE PROGRAMS

Seven degrees are granted by College of DuPage:

- Associate in Applied Science Degree (p. 37)
- Associate in Arts Degree (p. 37)
- Associate in Engineering Science Degree (p. 41)
- Associate in Fine Arts Degree - Art (p. 43)
- Associate in Fine Arts Degree - Music (p. 47)
- Associate in General Studies Degree (p. 50)
- Associate in Science Degree (p. 51)

Degrees are awarded at the close of each semester. However, when a student completes all requirements for a degree, the completion date is recorded on the student's permanent academic record. The requirements for each degree are recommended by the faculty and approved by the president of the College.

Associate in Applied Science Degree

Degree Requirements

(Total Minimum Credits Required: 60)

Each candidate for an Associate in Applied Science (A.A.S.) degree shall:

1. Select courses to complete the required credits from:
 - a. general education (p.) core requirement courses,
 - b. coursework in the Global/Multicultural Studies (p. 27) or Contemporary Life Skills (p. 29) category,
 - c. specific program Career/Technical Education required courses, and
 - d. additional coursework if necessary to a minimum of 60 credits, but due to external licensure and certification, programs may require more than 60 credits.

2. Satisfactorily complete a minimum of 18 credits in general education courses as specified below. (Refer to the Educational Opportunities (p.) page for a discussion of general education core requirements.)

- a. **Communication** - 6 credits

Code	Title	Credits

Written

ENGLI 1101	English Composition I	3
or ENGLI 1105	Workplace Writing	

Oral

Select one of the following:		3

SPEEC 1100	Fundamentals of Speech Communication

SPEEC 1120	Small-Group Communication

SPEEC 1150	Introduction to Business Communication

- b. **Physical and Life Sciences** - 3 to 5 credits

Select at least one course with a laboratory component.

- c. **Mathematics** - 3 to 5 credits

Select a minimum of 3 credits (1000-level or above). Select MATH 1102 Mathematics for Health Sciences, MATH 1104 Mathematics for Horticulture, or MATH 1120 Mathematical Foundations for Diagnostic Medical Imaging Sonographers only where required in the degree program. Only one of the following three statistics courses will count toward overall degree requirement credit: MATH 1635 Statistics, PSYCH 2280 Statistics/Social & Behavioral Sciences, or SOCIO 2205 Statistics for the Social and Behavioral Sciences. Only one of the following courses may count toward overall degree credit: MATH 1428 College Algebra With Applications or MATH 1431 Precalculus I.

- d. **Humanities and Fine Arts** - 3 credits

- e. **Social and Behavioral Sciences** - 3 credits

3. Complete at least 2 credits from the list of courses in the Global/Multicultural Studies (p. 27) or Contemporary Life Skills (p. 29) category.
4. The minimum number of program-specific credits required for an A.A.S. degree varies with each program, but must total at least 20 credits.
5. Satisfy graduation requirements (p.) for all associate degrees.
6. Earn no more than 16 credits in courses numbered 1800 or 2800, 1840 or 2840, 1820 to 1829, and 2820 to 2829, or labeled as independent study, experimental/pilot, selected topics or field/experiential.
7. Earn no more than 4 credits in Physical Education activity courses.
8. Earn no more than 12 credits with a satisfactory/fail grade option.
9. Earn no more than 42 credits by demonstrated competence through the Advanced Placement Program (AP), designated course-specific subject examinations of the College Level Examination Program (CLEP), and the College of DuPage Proficiency Through an Instructor Program.

Associate in Arts Degree

(Total Minimum Credits Required: 60)

(A complete list of General Education Core Curriculum transfer courses is available at the Illinois Articulation Initiative website: www.itransfer.org (<http://www.itransfer.org>)).

Each candidate for an Associate in Arts (A.A.) degree shall:

1. Select courses to complete the required credits from:
 - a. general education core requirement courses,
 - b. coursework in the Human Relations, Global/ Multicultural Studies, and Contemporary Life Skills categories and
 - c. additional coursework (see Notes at end of A.A. degree) to a minimum of 60 credits.
2. Satisfactorily complete a minimum of 37 credits in General Education Core Curriculum (Illinois Articulation Initiative course codes are listed in parentheses after each course or sequence) in the Communication, Physical and Life Sciences, Mathematics, Humanities and Fine Arts, and Social and Behavioral Sciences categories as specified below.

- a. **Communication** - 9 credits

Code	Title	Credits
Written		
ENGLI 1101	English Composition I (C1 900) ¹	3
ENGLI 1102	English Composition II (C1 901R) ¹	3

Oral		
SPEEC 1100	Fundamentals of Speech Communication (C2 900) ¹	3

¹ Grade of "C" or higher required.

b. Physical and Life Sciences - 7 to 10 credits

Select one course from Life Sciences and one course from Physical Sciences. At least one course must have a laboratory component.

Code	Title	Credits
Life Sciences		
BIOLO 1100	Survey of Biology (L1 900L)	4
BIOLO 1110	Environmental Biology (L1 905L)	4
BIOLO 1120	Introduction to Genetics (No Lab) (L1 906)	3
BIOLO 1130	Fundamentals of Biotechnology (L1 906L)	4
BIOLO 1151	Principles of Biological Science (L1 910L)	5
Physical Sciences		
<i>Chemistry</i>		
CHEMI 1105	Contemporary Chemistry (P1 903L)	4
CHEMI 1211	Survey of General Chemistry (P1 902L)	5
CHEMI 1551	Principles of Chemistry I (P1 902L)	5
<i>Earth Science</i>		
EARTH 1101	Physical Geology of Earth's Interior (P1 907L)	4
EARTH 1102	Physical Geology of Earth's Surface (P1 907L)	4
EARTH 1105	Environmental Geology (P1 908L)	4
EARTH 1110	Introduction to Meteorology (P1 905L)	4
EARTH 1111	Climate and Global Change (No Lab) (P1 905)	3
EARTH 1115	Severe and Unusual Weather (P1 905L)	4
EARTH 1119	Weather Impacts and Preparedness (No Lab) (P1 905)	3
EARTH 1120	Introduction to Astronomy (No Lab) (P1 906)	3
EARTH 1122	Astronomy: The Solar System (P1 906L)	4
EARTH 1124	Astronomy: Stars and Galaxies (P1 906L)	4
EARTH 1126	Observational Astronomy (P1 906L)	3
Select one of the following: ¹		4
EARTH 1130	Introduction to Oceanography (P1 905L)	
EARTH 1131	Fundamentals of Oceanography (No Lab) (P1 905)	
EARTH 1135	Water Science-Fundamentals of Hydrology (P1 905L)	4
Select one of the following: ¹		4
EARTH 1140	Fundamentals of Earth Science (P1 905L)	
EARTH 1141	Introduction to Earth Science (P1 905)	

Physics

PHYSI 1100	Physics (P1 900L)	4
PHYSI 1150	Energy and Society (P1 901)	3
PHYSI 1180	Quarks to Cosmos: Discoveries in the Modern Era (P1 900)	3
PHYSI 1201	General Physics I (P1 900L)	5
PHYSI 2111	Physics for Science and Engineering I (P2 900L)	5

¹ Not both

c. Mathematics - 3 to 5 credits

Code	Title	Credits
MATH 1218	General Education Mathematics (M1 904)	3
MATH 1220	Quantitative Literacy (M1 901)	3
MATH 1322	Mathematics for Elementary School Teachers II (M1 903)	3
MATH 1533	Finite Mathematics (M1 906)	4
MATH 1635	Statistics (M1 902) ¹	4
MATH 2000	Survey of Calculus (M1 900-O)	3
MATH 2115	Discrete Mathematics (M1 905)	3
MATH 2134	Calculus for Business and Social Science (M1 900-B)	4
MATH 2231	Calculus and Analytic Geometry I (M1 900-1)	5
MATH 2232	Calculus and Analytic Geometry II (M1 900-2)	5
MATH 2233	Calculus and Analytic Geometry III (M1 900-3)	4
PSYCH 2280	Statistics/Social & Behavioral Sciences (M1 902) ¹	3
SOCIO 2205	Statistics for the Social and Behavioral Sciences (M1 902) ¹	3

¹ Only one from these three courses may count toward overall degree requirement credit.

d. Humanities and Fine Arts - 9 credits

Select at least one course from Humanities and at least one course from Fine Arts.

Humanities

Code	Title	Credits
<i>Chinese</i>		
CHINE 2202	Intermediate Chinese II (H1 900)	4
<i>English</i>		
ENGLI 1130	Introduction to Literature (H3 900)	3
ENGLI 1150	Short Fiction (H3 901)	3
ENGLI 1151	Novel (H3 901)	3
ENGLI 1152	Poetry (H3 903)	3
ENGLI 1153	Drama (H3 902)	3
ENGLI 1154	Film As Literature (HF 908) ¹	3
ENGLI 1157	Children's Literature (H3 918)	3

ENGLI 1158	Bible As Literature (H5 901)	3
ENGLI 1159	Greek Mythology (H9 901)	3
ENGLI 1160	Native American Literature (H3 910D)	3
ENGLI 1161	Multicultural Literatures of the U.S. (H3 910D)	3
ENGLI 1165	Literature, Gender, and Sexualities (H3 911D)	3
ENGLI 2220	British Literature to 1800 (H3 912)	3
ENGLI 2221	British Literature From 1800 Through The Present (H3 913)	3
ENGLI 2223	American Literature From the Colonial Period to the Civil War (H3 914)	3
ENGLI 2224	American Literature From the Civil War to the Present (H3 915)	3
ENGLI 2226	World Literature (H3 907)	3
ENGLI 2227	Modern European Literature (H3 907)	3
ENGLI 2228	Shakespeare (H3 905)	3
ENGLI 2262	Non-Western Literature (H3 908N)	3
<i>French</i>		
FRENC 2202	Intermediate French II (H1 900)	4
FRENC 2251	Conversation and Composition I (H1 900)	3
FRENC 2252	Conversation and Composition II (H1 900)	3
<i>German</i>		
GERMA 2202	Intermediate German II (H1 900)	4
GERMA 2251	Conversation and Composition I (H1 900)	3
GERMA 2252	Conversation and Composition II (H1 900)	3
<i>History²</i>		
HISTO 1110	Foundations of the European World (H2 901)	3
HISTO 1120	Europe in the Modern World (H2 902)	3
HISTO 1160	World Civilization Since 1300 (H2 907)	3
HISTO 2205	History of Asia (H2 903N)	3
HISTO 2220	History and Culture of China (H2 903N)	3
HISTO 2225	History and Culture of Russia (H2 908)	3
HISTO 2230	History and Culture of Japan (H2 908)	3
HISTO 2235	20th Century World History (H2 903N)	3
HISTO 2245	History and Culture of England (H2 908)	3
<i>Humanities</i>		
HUMNT 1102	Introduction to Humanities: Ideas and Values (H9 900)	3
HUMNT 1103	Introduction to World Mythology (H9 901)	3
HUMNT 1104	Women in Arts: Cultural and Artistic Expressions of Gender (H9 907D) ¹	3
HUMNT 1105	Humanities Beyond the U.S. & Europe (H9 904D) ¹	3
HUMNT 1110	The Arts and Cultural Diversity (H9 906D) ¹	3
HUMNT 1120	Introduction to Medical Humanities (H9 900)	3

HUMNT 1150	Intersections of Humanities, Math, And Science (H9 900)	3

Italian

ITALI 2202	Intermediate Italian II (H1 900)	4

Japanese

JAPAN 2202	Intermediate Japanese II (H1 900)	4

Korean

KOREA 2202	Intermediate Korean II (H1 900)	4

Motion Picture/Television

MPTV 1154	Film As Literature (HF 908)	3

Philosophy

PHILO 1100	Introduction to Philosophy (H4 900)	3

PHILO 1110	Ethics (H4 904)	3

PHILO 1116	Environmental Ethics (H4 904)	3

PHILO 1120	Logic (H4 906)	3

PHILO 1125	Critical Thinking (H4 906)	3

PHILO 1150	World Religions (H5 904N)	3

PHILO 2010	Ancient Philosophy (H4 901)	3

PHILO 2011	Early Modern Philosophy (H4 902)	3

PHILO 2150	Philosophy of Religion (H4 905)	3

PHILO 2155	Asian Thought	3

Religious Studies

RELIG 1100	Introduction to Religion (H5 900)	3

RELIG 1110	Introduction to the Bible: Old Testament (H5 901)	3

RELIG 1120	Introduction to the Bible: New Testament (H5 901)	3

RELIG 1150	World Religions (H5 904N)	3

RELIG 2155	Asian Thought	3

RELIG 2160	Judaism, Christianity and Islam (H5 901)	3

Russian

RUSSI 2202	Intermediate Russian II (H1 900)	4

Spanish

SPANI 2202	Intermediate Spanish II (H1 900)	4

SPANI 2206	Spanish for Heritage Speakers I (H1 900)	4

SPANI 2208	Spanish for Heritage Speakers II (H1 900)	4

SPANI 2251	Conversation and Composition I (H1 900)	3

SPANI 2252	Conversation and Composition II (H1 900)	3

Fine Arts

Code	Title	Credits
<i>Art</i>		
ART 1100	Introduction to Visual Art and Culture (F2 900)	3
ART 2211	Art Histories Before 1400 CE (F2 901)	3
ART 2212	Art Histories 1400 to 1950 (F2 902)	3
ART 2213	Art Histories Since 1950 (F2 902)	3
ART 2214	Non-Western Art (F2 903N)	3

English

ENGLI 1135	Introduction to Film Art (F2 908)	3
ENGLI 1145	Film History (F2 909)	3
ENGLI 1154	Film As Literature (HF 908) ¹	3

Humanities

HUMNT 1101	Introduction to Humanities: The Arts (F9 900)	3
HUMNT 1104	Women in Arts: Cultural and Artistic Expressions of Gender (HF 907D) ¹	3
HUMNT 1105	Humanities Beyond the U.S. & Europe (HF 904N) ¹	3
HUMNT 1110	The Arts and Cultural Diversity (HF 906D) ¹	3

Motion Picture/Television

MPTV 1135	Introduction to Film Art (F2 908)	3
MPTV 1145	Film History (F2 909)	3
MPTV 1154	Film As Literature (HF 908)	3

Music

MUSIC 1100	Music Appreciation (F1 900)	3
MUSIC 1104	Introduction to American Music (F1 904)	3
MUSIC 1115	Introduction to World Music (F1 903N)	3

Theatre

THEAT 1100	Theater Appreciation (F1 907)	3

¹ Interdisciplinary credit (HF) may be earned as either Fine Arts or Humanities.

² Earn no more than 6 History credits in Gen Ed categories. Additional credits in History may be earned as elective credit.

e. **Social and Behavioral Science - 9 credits**

Courses must be selected from at least two disciplines.

Code	Title	Credits
Anthropology		
ANTHR 1000	Introduction to Anthropology (S1 900N)	3
ANTHR 1100	Cultural Anthropology (S1 901N)	3
ANTHR 1105	Practical Anthropology (S1 904D)	3
ANTHR 1130	People and Cultures of the World (S1 904D)	3
ANTHR 1200	Discovering Archaeology (S1 903)	3
ANTHR 1400	Race, Sex and Human Evolution (S1 902)	3
Economics		
ECONO 2200	Principles of Economics (S3 900)	3
ECONO 2201	Principles of Macroeconomics (S3 901)	3
ECONO 2202	Principles of Microeconomics (S3 902)	3
Geography		
GEOGR 1100	Western World Geography (S4 900)	3
GEOGR 1105	Eastern World Geography (S4 902N)	3
GEOGR 1120	Economic Geography (S4 903N)	3
GEOGR 1130	Cultural Geography (S4 900N)	3
GEOGR 1140	Urban Geography (S4 901)	3
History ¹		

HISTO 1130	History of the United States to 1865 (S2 900)	3
HISTO 1140	History of the United States Since 1865 (S2 901)	3
HISTO 2210	History and Culture of Africa (S2 907N)	3
HISTO 2215	History and Culture of South Asia (S2 916N)	3
HISTO 2242	African-American History (S2 923D)	3
HISTO 2260	United States History Since 1945 (S2 901)	3

Political Science

POLS 1100	Introduction to Political Science (S5 903)	3
POLS 1101	American Politics (S5 900)	3
POLS 1105	State and Local Politics (S5 902)	3
POLS 2203	Comparative Politics (S5 905)	3
POLS 2220	World Politics (S5 904N)	3

Psychology

PSYCH 1100	General Psychology (S6 900)	3
PSYCH 2230	Developmental Psychology: Childhood and Adolescence (S6 903)	3
PSYCH 2233	Developmental Psychology: Adolescence (S6 904)	3
PSYCH 2235	Developmental Psychology: Adulthood (S6 905)	3
PSYCH 2237	Developmental Psychology: The Life Span (S6 902)	3
PSYCH 2240	Social Psychology (S8 900)	3

Sociology

SOCIO 1100	Introduction to Sociology (S7 900)	3
SOCIO 1120	Sociology of Sex, Gender and Power (S7 904D)	3
SOCIO 2210	Social Problems (S7 901)	3
SOCIO 2215	Race and Racism in America (S7 903D)	3
SOCIO 2220	Sexual Relationships, Marriage & Family (S7 902)	3

¹ Earn no more than 6 History credits in Gen Ed categories. Additional credits in History may be earned as elective credit.

3. Fulfill these requirements in the categories specified

- Complete at least one course from the Human Relations (p. 26) category.
- Complete at least one course from the Global/Multicultural Studies (p. 27) category.
- Complete at least one course from the Contemporary Life Skills (p. 29) category.

4. Select courses to complete the minimum required 60 credits from General Education Core Curriculum courses, elective courses, and up to 10 credits in Career/Technical Education courses.

5. Satisfy graduation requirements (p.) for all associate degrees.

6. Earn no more than six credits in History in the Humanities and Fine Arts, and Social and Behavioral Sciences categories combined for general education credit. Additional credits in History from general education or other categories may be earned as elective credit, unless restricted by degree requirements.
7. Earn no more than four credits in Physical Education activity courses.
8. Only one of the following courses may count toward the degree: Mathematics 1428 or Mathematics 1431.
9. Earn no more than 16 credits in courses numbered 1800 or 2800, 1840 or 2840, 1820 to 1829, and 2820 to 2829, or labeled as independent study, experimental/pilot, selected topics or field/experiential.
10. Earn no more than 12 credits with a satisfactory/fail grade option in courses counted toward elective credit.
11. Earn General Education Core Curriculum course credit with letter grades, not satisfactory/fail grades.
12. Earn no more than 42 credits for the Communication, Physical and Life Sciences, Mathematics, Humanities and Fine Arts, and Social and Behavioral Sciences categories by demonstrated competence through the Advanced Placement Program (AP), designated course-specific subject examinations of the College Level Examination Program (CLEP), and the College of DuPage Proficiency Through an Instructor Program.
13. Earn the remaining credits in courses that normally apply to a bachelor's degree as indicated in the transfer program guides.

Notes: For help in choosing additional coursework beyond the General Education Core to fulfill this degree, students should consult a Student Success Counselor or Program Advisor from their area of interest for suggestions regarding course selection from the range of offerings in a specific field of study.

There is no guarantee that elective or Career/Technical Education courses will transfer as specific course equivalents to a baccalaureate-granting institution or other colleges. The transferability of these courses needs to be validated with a transfer institution.

Degree-seeking students should complete the General Education Core Curriculum and required sequence courses before transfer to another participating IAI institution to guarantee the completion of lower division general education coursework.

Associate in Engineering Science Degree

Degree Requirements

(Total Minimum Credits Required: 68)

Students should check with an Engineering advisor at College of DuPage and consult the Transfer Guide at cod.edu/programs/engineering/transfer.aspx (<http://www.cod.edu/programs/engineering/transfer.aspx>).

Each candidate for an Associate in Engineering Science (A.E.S.) degree shall:

- Select courses to complete the required 68 credits from:
 - Essential prerequisite courses totaling 36 to 40 credit hours;
 - Engineering specialty courses totaling 8 to 23 credit hours;
 - General education core requirement courses totaling 9 to 18 credit hours;
 - Additional elective coursework¹ to bring the total for the degree to 68 credit hours.
- Satisfy graduation requirements (p.) for all associate degrees.
- Earn no credit with a satisfactory/fail grade option.
- Earn no more than 42 credits for the Communication, Physical and Life Sciences, Mathematics, Humanities and Fine Arts, and Social and Behavioral Sciences categories by demonstrated competence through the Advanced Placement Program (AP), designated course-specific subject examinations of the College Level Examination Program (CLEP), and the College of DuPage Proficiency Through an Instructor Program.

Essential Prerequisite Courses - 36 to 40 credit Hours

Mathematics - 18 Credits

Code	Title	Credits
MATH 2231	Calculus and Analytic Geometry I (M1 900-1)	5
MATH 2232	Calculus and Analytic Geometry II (M1 900-2)	5
MATH 2233	Calculus and Analytic Geometry III (M1 900-3)	4
MATH 2270	Differential Equations	4
Total Credits		18

Chemistry - 5 Credits

Code	Title	Credits
CHEM 1551	Principles of Chemistry I (P1 902L)	5
Total Credits		5

Physics - 10 to 14 Credits

Code	Title	Credits
Required		
PHYSI 2111	Physics for Science and Engineering I (P2 900L)	5
PHYSI 2112	Physics for Science and Engineering II	5
Optional		
PHYSI 2115	Physics for Science and Engineering III	4
Total Credits		10-14

Computer and Information Science - 3 to 4 Credits

Code	Title	Credits
CIS 2485	C++ for Science and Engineering	3-4
or CIS 2541	Introduction to C++ Programming	
Total Credits		3-4

Engineering Specialty Courses - 8 to 23 credit hours

Code	Title	Credits
Engineering		
ENGIN 1101	Engineering Graphics and Design	
ENGIN 2201	Statics	

ENGIN 2202	Dynamics
ENGIN 2203	Mechanics of Materials
ENGIN 2205	Engineering Thermodynamics
ENGIN 2207	Engineering Economy
ENGIN 2210	Circuit Analysis I
ENGIN 2213	Introduction to Digital Systems
ENGIN 2220	Circuit Analysis II
ENGIN 2223	Microcontrollers

Other Sciences*Biology*

BIOLO 1151	Principles of Biological Science (L1 910L)

Chemistry

CHEMI 1552	Principles of Chemistry II
CHEMI 2551	Organic Chemistry I
CHEMI 2552	Organic Chemistry II

Total Credits 8-23**General Education Courses - 9 to 18 credit hours****Communication - 6 credits**

Code	Title	Credits
ENGLI 1101	English Composition I ²	3
ENGLI 1102	English Composition II ²	3

Total Credits 6**Humanities and Fine Arts - 0 to 9 credits**

Code	Title	Credits

Humanities*Chinese*

CHINE 2202	Intermediate Chinese II (H1 900)

English

ENGLI 1130	Introduction to Literature (H3 900)
ENGLI 1150	Short Fiction (H3 901)
ENGLI 1151	Novel (H3 901)
ENGLI 1152	Poetry (H3 903)
ENGLI 1153	Drama (H3 902)
ENGLI 1154	Film As Literature (HF 908)
ENGLI 1157	Children's Literature (H3 918)
ENGLI 1158	Bible As Literature (H5 901)
ENGLI 1159	Greek Mythology (H9 901)
ENGLI 1161	Multicultural Literatures of the U.S. (H3 910D)
ENGLI 1165	Literature, Gender, and Sexualities (H3 911D)
ENGLI 2220	British Literature to 1800 (H3 912)
ENGLI 2221	British Literature From 1800 Through The Present (H3 913)
ENGLI 2223	American Literature From the Colonial Period to the Civil War (H3 914)
ENGLI 2224	American Literature From the Civil War to the Present (H3 915)
ENGLI 2226	World Literature (H3 907)
ENGLI 2227	Modern European Literature (H3 907)
ENGLI 2228	Shakespeare (H3 905)
ENGLI 2262	Non-Western Literature (H3 908N)

French

FRENC 2202	Intermediate French II (H1 900)
FRENC 2251	Conversation and Composition I (H1 900)
FRENC 2252	Conversation and Composition II (H1 900)

German

GERMA 2202	Intermediate German II (H1 900)
GERMA 2251	Conversation and Composition I (H1 900)
GERMA 2252	Conversation and Composition II (H1 900)

History

HISTO 1110	Foundations of the European World (H2 901)
HISTO 1120	Europe in the Modern World (H2 902)
HISTO 1160	World Civilization Since 1300 (H2 907)
HISTO 2205	History of Asia (H2 903N)
HISTO 2220	History and Culture of China (H2 903N)
HISTO 2225	History and Culture of Russia (H2 908)
HISTO 2230	History and Culture of Japan (H2 908)
HISTO 2235	20th Century World History (H2 903N)
HISTO 2245	History and Culture of England (H2 908)

Humanities

HUMNT 1102	Introduction to Humanities: Ideas and Values (H9 900)
HUMNT 1103	Introduction to World Mythology (H9 901)
HUMNT 1104	Women in Arts: Cultural and Artistic Expressions of Gender (HF 907D)
HUMNT 1105	Humanities Beyond the U.S. & Europe (HF 904N)
HUMNT 1110	The Arts and Cultural Diversity (HF 906D)
HUMNT 1120	Introduction to Medical Humanities (H9 900)
HUMNT 1150	Intersections of Humanities, Math, And Science (H9 900)

Italian

ITALI 2202	Intermediate Italian II (H1 900)

Japanese

JAPAN 2202	Intermediate Japanese II (H1 900)

Korean

KOREA 2202	Intermediate Korean II (H1 900)

Motion Picture/Television

MPTV 1154	Film As Literature (HF 908)

Philosophy

PHILO 1100	Introduction to Philosophy (H4 900)
PHILO 1110	Ethics (H4 904)
PHILO 1116	Environmental Ethics (H4 904)
PHILO 1120	Logic (H4 906)
PHILO 1125	Critical Thinking (H4 906)
PHILO 1150	World Religions (H5 904N)
PHILO 2010	Ancient Philosophy (H4 901)
PHILO 2011	Early Modern Philosophy (H4 902)
PHILO 2150	Philosophy of Religion (H4 905)
PHILO 2155	Asian Thought (H4 903N)

Religious Studies

RELIG 1100	Introduction to Religion (H5 900)

RELIG 1110	Introduction to the Bible: Old Testament (H5 901)
RELIG 1120	Introduction to the Bible: New Testament (H5 901)
RELIG 1150	World Religions (H5 904N)
RELIG 2155	Asian Thought (H4 903N)
RELIG 2160	Judaism, Christianity and Islam (H5 901)
<i>Russian</i>	
RUSSI 2202	Intermediate Russian II (H1 900)
<i>Spanish</i>	
SPANI 2202	Intermediate Spanish II (H1 900)
SPANI 2206	Spanish for Heritage Speakers I (H1 900)
SPANI 2208	Spanish for Heritage Speakers II (H1 900)
SPANI 2251	Conversation and Composition I (H1 900)
SPANI 2252	Conversation and Composition II (H1 900)
Fine Arts	
<i>Art</i>	
ART 2213	Art Histories Since 1950 (F2 902)

Social and Behavioral Sciences - 0 to 9 credits

Code	Title	Credits
<i>Anthropology</i>		
ANTHR 1000	Introduction to Anthropology (S1 900N)	
ANTHR 1100	Cultural Anthropology (S1 901N)	
ANTHR 1105	Practical Anthropology (S1 904D)	
ANTHR 1130	People and Cultures of the World (S1 904D)	
ANTHR 1200	Discovering Archaeology (S1 903)	
ANTHR 1400	Race, Sex and Human Evolution (S1 902)	
<i>Economics</i>		
ECONO 2200	Principles of Economics (S3 900)	
ECONO 2201	Principles of Macroeconomics (S3 901)	
ECONO 2202	Principles of Microeconomics (S3 902)	
<i>Geography</i>		
GEOGR 1100	Western World Geography (S4 901)	
GEOGR 1105	Eastern World Geography (S4 902N)	
GEOGR 1120	Economic Geography (S4 903N)	
GEOGR 1130	Cultural Geography (S4 900N)	
<i>History</i>		
HISTO 1130	History of the United States to 1865 (S2 900)	
HISTO 1140	History of the United States Since 1865 (S2 901)	
HISTO 2210	History and Culture of Africa (S2 907N)	
HISTO 2215	History and Culture of South Asia (S2 916N)	
HISTO 2242	African-American History (S2 923D)	
HISTO 2260	United States History Since 1945 (S2 901)	
<i>Political Science</i>		
POLS 1100	Introduction to Political Science (S5 903)	
POLS 1101	American Politics (S5 900)	
POLS 1105	State and Local Politics (S5 902)	
POLS 2203	Comparative Politics (S5 905)	
POLS 2220	World Politics (S5 904N)	
<i>Psychology</i>		

PSYCH 1100	General Psychology (S6 900)
PSYCH 2230	Developmental Psychology: Childhood and Adolescence (S6 903)
PSYCH 2233	Developmental Psychology: Adolescence (S6 904)
PSYCH 2235	Developmental Psychology: Adulthood (S6 905)
PSYCH 2237	Developmental Psychology: The Life Span (S6 902)
PSYCH 2240	Social Psychology (S8 900)
<i>Sociology</i>	
SOCIO 1100	Introduction to Sociology (S7 900)
SOCIO 1120	Sociology of Sex, Gender and Power (S7 904D)
SOCIO 2210	Social Problems (S7 901)
SOCIO 2215	Race and Racism in America (S7 903D)
SOCIO 2220	Sexual Relationships, Marriage & Family (S7 902)

Notes

¹ If needed, select remaining elective courses from IAI General Education, Essential Prerequisite Courses and Engineering Specialty Courses to reach 68 credits.

² Grade of C or higher required.

Courses listed under Essential Prerequisite Courses and Engineering Specialty Courses, as well as the A.E.S. degree, will transfer from COD based on criteria set by each baccalaureate degree-granting institution. Check with an advisor at College of DuPage and your transfer institution for the appropriate choices in Humanities, Social and Behavioral Sciences, and Fine Arts for transfer to a chosen program of study.

Biology may be required for Bio-Engineering majors. See a Student Success Counselor for help in choosing the correct biology course.

Associate in Fine Arts Degree - Art

Degree Requirements

(Total Minimum Credits Required: 61)

Each candidate for an Associate in Fine Arts-Art Degree shall:

- Select courses to complete the required 61 credits from:
 - Specific program required courses and electives totaling a minimum of 36 credit hours;
 - General education core requirements totaling a minimum of 25 credit hours.
- Earn no more than 6 credits in History in the Humanities and Fine Arts and Social and Behavioral Sciences categories combined for general education credit.
- Earn no credit with a satisfactory/fail grade option.
- Earn no more than 42 credits for the Communication, Physical and Life Sciences, Mathematics, Humanities and Fine Arts, and Social and Behavioral Sciences categories by demonstrated competence

through the Advanced Placement (AP) Program, designated course-specific subject examinations of the College Level Examination Program (CLEP), and the College of DuPage Proficiency Through an Instructor Program.

Program Required courses - 36 credit hours

Art History Core Courses - 9 credits

Code	Title	Credits
ART 2211	Art Histories Before 1400 CE	3
ART 2212	Art Histories 1400 to 1950	3
ART 2213	Art Histories Since 1950	3
Total Credits		9

Art History Elective - 3 credits

Choose from the following courses, or any additional approved art history elective at the 2000 level.

Code	Title	Credits
ART 2214	Non-Western Art	
ART 2215	History of Adornment	
ART 2216	Introduction to Philosophy of Art	
ART 2217	Art and Nature	
ART 2218	Seeing Animals	
ART 1823	Selected Topics in Art	
or ART 2820	Advanced Selected Topics I	
MPTV 1111	Film/Video Aesthetics	
MPTV/ENGLI 1145	Film History	
PHOTO 1105	History of Photography	
Total Credits		3

Art Studio Core Courses - 12 credits

Complete the Art Studio Core courses before enrolling in Art Studio Elective courses.

Code	Title	Credits
ART 1101	Drawing I	3
ART 1151	Two-Dimensional Foundations Studio	3
ART 1152	Three-Dimensional Foundations Studio	3
ART 2201	Life Drawing I	3
Total Credits		12

Art Studio Electives - 12 to 15 credits

Select at least 4 of the following elective courses, or any additional approved art studio elective at the 2000 level, with at least 1 from 3D Electives and 1 from 4D/Digital Media Electives.

Code	Title	Credits
<i>3D Electives</i>		
ART 2231	Sculpture I	
ART 2232	Sculpture II	
ART 2241	Wheel Throwing Ceramics	
ART 2242	Glaze Chemistry	
ART 2244	Ceramics Wood, Raku, & Pit Firings	
ART 2251	Intermediate Jewelry/Metalsmithing: Casting	

ART 2252	Intermediate Jewelry/Metalsmithing: Forming & Fabrication	
<i>4D/Digital Media Electives</i>		
ART 2266	Digital Art I	
ART 2267	Digital Fabrication Studio	
ART 2281	Time Based Media I	
ART 2282	Time Based Media II	
GRDSN 1102	Graphic Design 1	
MPTV 1011	Introduction to Motion Picture and Television	
MPTV 1311	Introduction to Animation	
PHOTO 1101	Foundations of Digital Photography	
<i>2D/Other Electives</i>		
ART 1102	Drawing II	
ART 1199	Introduction to Print Media I	
ART 1800	Special Project	
ART 1823	Selected Topics in Art (Studio)	
ART 2151	Color Theory	
ART 2202	Life Drawing II	
ART 2221	Painting I	
ART 2222	Painting II	
ART 2275	Intaglio Printmaking	
ART 2276	Lithography	
ART 2900	Portfolio Development and Professional Practices for Artists	
ART 2800	Special Project	
PHOTO 1100	Fundamentals of Photography	
PHOTO 1102	Foundations of Film Photography	
Total Credits		12-15

General Education Courses - 25 credit hours

Communication - 9 credits

Code	Title	Credits
ENGLI 1101	English Composition I	3
ENGLI 1102	English Composition II	3
SPEEC 1100	Fundamentals of Speech Communication	3
Total Credits		9

Physical and Life Sciences - 4 to 10 credits

Select at least one course from Life Sciences or Physical Sciences with a laboratory component. Students with sufficient preparation may select from IAI science majors courses. Check with www.itransfer.org (<http://www.itransfer.org>). A minimum of 4 credits must be selected from the following list:

Life Sciences		
<i>Biology</i>		
BIOLO 1100	Survey of Biology (L1 900L)	
BIOLO 1110	Environmental Biology (L1 905L)	
BIOLO 1120	Introduction to Genetics (L1 906, No Lab)	
BIOLO 1130	Fundamentals of Biotechnology (L1 906L)	
BIOLO 1151	Principles of Biological Science (L1 910L)	
Physical Sciences		
<i>Chemistry</i>		

CHEMI 1105	Contemporary Chemistry (P1 903L)	
CHEMI 1211	Survey of General Chemistry (P1 902L)	
CHEMI 1551	Principles of Chemistry I (P1 902L)	
Earth Science		
EARTH 1101	Physical Geology of Earth's Interior (P1 907L)	
EARTH 1102	Physical Geology of Earth's Surface (P1 907L)	
EARTH 1105	Environmental Geology (P1 908L)	
EARTH 1110	Introduction to Meteorology (P1 905L)	
EARTH 1111	Climate and Global Change (P1 905, No Lab)	
EARTH 1115	Severe and Unusual Weather (P1 905L)	
EARTH 1119	Weather Impacts and Preparedness (P1 905, No Lab)	
EARTH 1120	Introduction to Astronomy (P1 906, No Lab)	
EARTH 1122	Astronomy: The Solar System (P1 906L)	
EARTH 1124	Astronomy: Stars and Galaxies (P1 906L)	
EARTH 1126	Observational Astronomy (P1 906L)	
EARTH 1130	Introduction to Oceanography (P1 905L)	
	or EARTH 1131 Fundamentals of Oceanography	
	or EARTH 1135 Water Science-Fundamentals of Hydrology	
EARTH 1140	Fundamentals of Earth Science (P1 905L)	
	or EARTH 1141 Introduction to Earth Science	
Physics		
PHYSI 1100	Physics (P1 900L)	
PHYSI 1150	Energy and Society (P1 901, No Lab)	
PHYSI 1180	Quarks to Cosmos: Discoveries in the Modern Era (P1 900, No Lab)	
PHYSI 1201	General Physics I (P1 900L)	
PHYSI 2111	Physics for Science and Engineering I (P2 900L)	
Total Credits		4-10
Mathematics - 3 to 5 credits		
Code	Title	Credits
MATH 1218	General Education Mathematics (M1 904)	
MATH 1220	Quantitative Literacy (M1 901)	
MATH 1322	Mathematics for Elementary School Teachers II (M1 903)	
MATH 1533	Finite Mathematics (M1 906)	
MATH 1635	Statistics (M1 902)	
	or PSYCH 2280 Statistics/Social & Behavioral Sciences	
	or SOCIO 2205 Statistics for the Social and Behavioral Sciences	
MATH 2000	Survey of Calculus (M1 900-O)	
MATH 2115	Discrete Mathematics (M1 905)	
MATH 2134	Calculus for Business and Social Science (M1 900-B)	
MATH 2231	Calculus and Analytic Geometry I (M1 900-1)	
MATH 2232	Calculus and Analytic Geometry II (M1 900-2)	
MATH 2233	Calculus and Analytic Geometry III (M1 900-3)	
Total Credits		3-5

Humanities and Fine Arts - 6 credits

Code	Title	Credits
Humanities		
Chinese		
CHINE 2202	Intermediate Chinese II (H1 900)	
English		
ENGLI 1130	Introduction to Literature (H3 900)	
ENGLI 1150	Short Fiction (H3 901)	
ENGLI 1151	Novel (H3 901)	
ENGLI 1152	Poetry (H3 903)	
ENGLI 1153	Drama (H3 902)	
ENGLI 1154	Film As Literature (HF 908)	
ENGLI 1157	Children's Literature (H3 918)	
ENGLI 1158	Bible As Literature (H5 901)	
ENGLI 1159	Greek Mythology (H9 901)	
ENGLI 1161	Multicultural Literatures of the U.S. (H3 910D)	
ENGLI 1165	Literature, Gender, and Sexualities (H3 911D)	
ENGLI 2220	British Literature to 1800 (H3 912)	
ENGLI 2221	British Literature From 1800 Through The Present (H3 913)	
ENGLI 2223	American Literature From the Colonial Period to the Civil War (H3 914)	
ENGLI 2224	American Literature From the Civil War to the Present (H3 915)	
ENGLI 2226	World Literature (H3 907)	
ENGLI 2227	Modern European Literature (H3 907)	
ENGLI 2228	Shakespeare (H3 905)	
ENGLI 2262	Non-Western Literature (H3 908N)	
French		
FRENC 2202	Intermediate French II (H1 900)	
FRENC 2251	Conversation and Composition I (H1 900)	
FRENC 2252	Conversation and Composition II (H1 900)	
German		
GERMA 2202	Intermediate German II (H1 900)	
GERMA 2251	Conversation and Composition I (H1 900)	
GERMA 2252	Conversation and Composition II (H1 900)	
History		
HISTO 1110	Foundations of the European World (H2 901)	
HISTO 1120	Europe in the Modern World (H2 902)	
HISTO 1160	World Civilization Since 1300 (H2 907)	
HISTO 2205	History of Asia (H2 903N)	
HISTO 2220	History and Culture of China (H2 903N)	
HISTO 2225	History and Culture of Russia (H2 908)	
HISTO 2230	History and Culture of Japan (H2 908)	
HISTO 2235	20th Century World History (H2 903N)	
HISTO 2245	History and Culture of England (H2 908)	
Humanities		
HUMNT 1102	Introduction to Humanities: Ideas and Values (H9 900)	
HUMNT 1103	Introduction to World Mythology (H9 901)	

HUMNT 1104	Women in Arts: Cultural and Artistic Expressions of Gender (HF 907D)
HUMNT 1105	Humanities Beyond the U.S. & Europe (HF 904N)
HUMNT 1110	The Arts and Cultural Diversity (HF 906D)
HUMNT 1120	Introduction to Medical Humanities (H9 900)
HUMNT 1150	Intersections of Humanities, Math, And Science (H9 900)
<i>Italian</i>	
ITALI 2202	Intermediate Italian II (H1 900)
<i>Japanese</i>	
JAPAN 2202	Intermediate Japanese II (H1 900)
<i>Korean</i>	
KOREA 2202	Intermediate Korean II (H1 900)
<i>Motion Picture/Television</i>	
MPTV 1154	Film As Literature (HF 908)
<i>Philosophy</i>	
PHILO 1100	Introduction to Philosophy (H4 900)
PHILO 1110	Ethics (H4 904)
PHILO 1116	Environmental Ethics (H4 904)
PHILO 1120	Logic (H4 906)
PHILO 1125	Critical Thinking (H4 906)
PHILO 1150	World Religions (H5 904N)
PHILO 2010	Ancient Philosophy (H4 901)
PHILO 2011	Early Modern Philosophy (H4 902)
PHILO 2150	Philosophy of Religion (H4 905)
PHILO 2155	Asian Thought (H4 903N)
<i>Religious Studies</i>	
RELIG 1100	Introduction to Religion (H5 900)
RELIG 1110	Introduction to the Bible: Old Testament (H5 901)
RELIG 1120	Introduction to the Bible: New Testament (H5 901)
RELIG 1150	World Religions (H5 904N)
RELIG 2155	Asian Thought (H4 903N)
RELIG 2160	Judaism, Christianity and Islam (H5 901)
<i>Russian</i>	
RUSSI 2202	Intermediate Russian II (H1 900)
<i>Spanish</i>	
SPANI 2202	Intermediate Spanish II (H1 900)
SPANI 2206	Spanish for Heritage Speakers I (H1 900)
SPANI 2208	Spanish for Heritage Speakers II (H1 900)
SPANI 2251	Conversation and Composition I (H1 900)
SPANI 2252	Conversation and Composition II (H1 900)
Fine Arts	
<i>Art</i>	
ART 2213	Art Histories Since 1950 (F2 902)

Social and Behavioral Sciences - 3 to 6 credits

Code	Title	Credits
<i>Anthropology</i>		
ANTHR 1000	Introduction to Anthropology (S1 900N)	
ANTHR 1100	Cultural Anthropology (S1 901N)	

ANTHR 1105	Practical Anthropology (S1 904D)
ANTHR 1130	People and Cultures of the World (S1 904D)
ANTHR 1200	Discovering Archaeology (S1 903)
ANTHR 1400	Race, Sex and Human Evolution (S1 902)
<i>Economics</i>	
ECONO 2200	Principles of Economics (S3 900)
ECONO 2201	Principles of Macroeconomics (S3 901)
ECONO 2202	Principles of Microeconomics (S3 902)
<i>Geography</i>	
GEOGR 1100	Western World Geography (S4 901)
GEOGR 1105	Eastern World Geography (S4 902N)
GEOGR 1120	Economic Geography (S4 903N)
GEOGR 1130	Cultural Geography (S4 900N)
<i>History</i>	
HISTO 1130	History of the United States to 1865 (S2 900)
HISTO 1140	History of the United States Since 1865 (S2 901)
HISTO 2210	History and Culture of Africa (S2 907N)
HISTO 2215	History and Culture of South Asia (S2 916N)
HISTO 2242	African-American History (S2 923D)
HISTO 2260	United States History Since 1945 (S2 901)
<i>Political Science</i>	
POLS 1100	Introduction to Political Science (S5 903)
POLS 1101	American Politics (S5 900)
POLS 1105	State and Local Politics (S5 902)
POLS 2203	Comparative Politics (S5 905)
POLS 2220	World Politics (S5 904N)
<i>Psychology</i>	
PSYCH 1100	General Psychology (S6 900)
PSYCH 2230	Developmental Psychology: Childhood and Adolescence (S6 903)
PSYCH 2233	Developmental Psychology: Adolescence (S6 904)
PSYCH 2235	Developmental Psychology: Adulthood (S6 905)
PSYCH 2237	Developmental Psychology: The Life Span (S6 902)
PSYCH 2240	Social Psychology (S8 900)
<i>Sociology</i>	
SOCIO 1100	Introduction to Sociology (S7 900)
SOCIO 1120	Sociology of Sex, Gender and Power (S7 904D)
SOCIO 2210	Social Problems (S7 901)
SOCIO 2215	Race and Racism in America (S7 903D)
SOCIO 2220	Sexual Relationships, Marriage & Family (S7 902)

Associate in Fine Arts Degree - Music

Degree Requirements

(Total Minimum Credits Required: 64)

Each candidate for an Associate in Fine Arts–Music degree shall:

- Select courses to complete the required 64 credits from:
 - Specific program required courses totaling a minimum of 35 hours;
 - General education core requirements (including coursework in the Human Relations and Global/Multicultural Studies or Contemporary Life Skills categories) totaling a minimum of 28 hours;
 - Elective courses to bring the total for the degree to 64 hours minimum.
- Earn no more than six credits in History in the Humanities and Fine Arts, and Social and Behavioral Sciences categories combined for general education credit. Additional credits in History from general education or other categories may be earned as elective credit.
- Earn no credit with a satisfactory/fail grade option.
- Earn no more than 42 credits for the Communication, Physical and Life Sciences, Mathematics, Humanities and Fine Arts, and Social and Behavioral Sciences categories by demonstrated competence through the Advanced Placement Program (AP), designated course-specific subject examinations of the College Level Examination Program (CLEP), and the College of DuPage Proficiency Through an Instructor Program.
- Show keyboard competence through one of the following options: Complete either MUSIC 2272 Class Piano IV, complete four semesters of MUSIC 1185 Applied Music II: Music Major on piano, or show keyboard proficiency by demonstrated competence through the College of DuPage Proficiency Through an Instructor Program. See a Music advisor for further information.

Notes: Although designed to meet transfer requirements, the A.F.A. degree does not complete the requirements of the Illinois Articulation Initiative (IAI) General Education Core Curriculum or lower division general education requirements at participating colleges/universities.

Students will need to fulfill the General Education requirements of the college/university to which they transfer. Completion of the A.F.A. does not guarantee admission either to a baccalaureate program or to upper division music courses. Students may be required to demonstrate their skill level through audit, placement test, audition or review of student recordings. Students are encouraged to complete the A.F.A. degree prior to transferring.

Program Required courses - 35 credit hours

Music Core Courses - 20 credits

Code	Title	Credits
MUSIC 1101	Music Theory I	3
MUSIC 1107	Aural Skills I	1
MUSIC 1171	Class Piano I	1
MUSIC 1102	Music Theory II	3
MUSIC 1108	Aural Skills II	1
MUSIC 1172	Class Piano II	1

MUSIC 2201	Music Theory III	3
MUSIC 2207	Aural Skills III	1
MUSIC 2271	Class Piano III	1
MUSIC 2202	Music Theory IV	3
MUSIC 2208	Aural Skills IV	1
MUSIC 2272	Class Piano IV	1
Total Credits		20

Music Literature/History Course - 3 credits

Code	Title	Credits
MUSIC 1105	Music Literature	3
Total Credits		3

Music Ensemble Courses - 4 credits

Code	Title	Credits
Choose four credits from the following:		4
MUSIC 1120	College of DuPage Concert Choir	
MUSIC 1125	College of DuPage Jazz Choir	
MUSIC 1130	College of DuPage Chamber Singers	
MUSIC 1140	Symphony Orchestra	
MUSIC 1141	Chamber Orchestra	
MUSIC 1150	DuPage Chorale	
MUSIC 1180	Community Band	
MUSIC 1181	DuPage Community Jazz Ensemble	
MUSIC 1190	COD Jazz & Popular Music Ensembles	
MUSIC 1192	Percussion Ensemble	
MUSIC 1193	Guitar Ensemble	
Total Credits		4

Applied Instruction Courses - 8 credits

Code	Title	Credits
MUSIC 1185	Applied Music II: Music Major (Private music lessons I to IV. Take one course each term for a total of 8 credits.)	2
Total Credits		8

Elective Coursework - 1 credit hour minimum

Any regular credit-bearing course at the College. However, since this is a transfer program, we highly recommend an approved course that will transfer seamlessly to a baccalaureate degree program.

General Education Courses - 28 credit hours

Communication - 9 credits

Code	Title	Credits
Written		
ENGLI 1101	English Composition I (C1 900) ¹	3
ENGLI 1102	English Composition II (C1 901R) ¹	3
Oral		
SPEEC 1100	Fundamentals of Speech Communication (C2 900) ¹	3

¹ Grade of "C" or higher required.

Physical and Life Sciences - 7 to 10 credits

Code	Title	Credits
Select one course from Life Sciences and one course from Physical Sciences. At least one course must have a laboratory component. Students with sufficient preparation may select from IAI science majors courses. Check with http://www.itransfer.org . A minimum of seven credits must be selected from the following list:		
Life Sciences		
<i>Biology</i>		
BIOLO 1100	Survey of Biology (L1 900L)	4
BIOLO 1110	Environmental Biology (L1 905L)	4
BIOLO 1120	Introduction to Genetics (No Lab) (L1 906)	3
BIOLO 1130	Fundamentals of Biotechnology (L1 906L)	4
BIOLO 1151	Principles of Biological Science (L1 910L)	5
Physical Sciences		
<i>Chemistry</i>		
CHEMI 1105	Contemporary Chemistry (P1 903L)	4
CHEMI 1211	Survey of General Chemistry (P1 902L)	5
CHEMI 1551	Principles of Chemistry I (P1 902L)	5
<i>Earth Science</i>		
EARTH 1101	Physical Geology of Earth's Interior (P1 907L)	4
EARTH 1102	Physical Geology of Earth's Surface (P1 907L)	4
EARTH 1105	Environmental Geology (P1 908L)	4
EARTH 1110	Introduction to Meteorology (P1 905L)	4
EARTH 1111	Climate and Global Change (No Lab) (P1 905)	3
EARTH 1115	Severe and Unusual Weather (P1 905L)	4
EARTH 1119	Weather Impacts and Preparedness (No Lab) (P1 905)	3
EARTH 1120	Introduction to Astronomy (No Lab) (P1 906)	3
EARTH 1122	Astronomy: The Solar System (P1 906L)	4
EARTH 1124	Astronomy: Stars and Galaxies (P1 906L)	4
EARTH 1126	Observational Astronomy (P1 906L)	3
Select one of the following: ¹		3-4
EARTH 1130	Introduction to Oceanography (P1 905L)	
EARTH 1131	Fundamentals of Oceanography (P1 905)	
EARTH 1135	Water Science-Fundamentals of Hydrology (P1 905L)	4
Select one of the following: ¹		3-4
EARTH 1140	Fundamentals of Earth Science (P1 905L)	
EARTH 1141	Introduction to Earth Science (P1 905)	
<i>Physics</i>		
PHYSI 1100	Physics (P1 900L)	4
PHYSI 1150	Energy and Society (P1 901)	3
PHYSI 1201	General Physics I (P1 900L)	5
PHYSI 2111	Physics for Science and Engineering I (P2 900L)	5

¹ Not both**Mathematics - 3 to 5 credits**

Code	Title	Credits
MATH 1218	General Education Mathematics (M1 904)	3
MATH 1220	Quantitative Literacy (M1 901)	3
MATH 1322	Mathematics for Elementary School Teachers II (M1 903)	3
MATH 1533	Finite Mathematics (M1 906)	4
MATH 1635	Statistics (M1 902) ¹	4
MATH 2000	Survey of Calculus (M1 900-O)	3
MATH 2115	Discrete Mathematics (M1 905)	3
MATH 2134	Calculus for Business and Social Science (M1 900-B)	4
MATH 2231	Calculus and Analytic Geometry I (M1 900-1)	5
MATH 2232	Calculus and Analytic Geometry II (M1 900-2)	5
MATH 2233	Calculus and Analytic Geometry III (M1 900-3)	4
PSYCH 2280	Statistics/Social & Behavioral Sciences (M1 902) ¹	3
SOCIO 2205	Statistics for the Social and Behavioral Sciences (M1 902) ¹	3

¹ Only one from these three courses may count toward overall degree requirement credit. MATH 1322 Mathematics for Elementary School Teachers II may not be used to meet this requirement.**Humanities and Fine Arts - 6 credits**

Select at least one course from Humanities and at least one course from Fine Arts.

Humanities		
Code	Title	Credits
<i>Chinese</i>		
CHINE 2202	Intermediate Chinese II (H1 900)	4
<i>English</i>		
ENGLI 1130	Introduction to Literature (H3 900)	3
ENGLI 1150	Short Fiction (H3 901)	3
ENGLI 1151	Novel (H3 901)	3
ENGLI 1152	Poetry (H3 903)	3
ENGLI 1153	Drama (H3 902)	3
ENGLI 1154	Film As Literature (HF 908) ¹	3
ENGLI 1157	Children's Literature (H3 918)	3
ENGLI 1158	Bible As Literature (H5 901)	3
ENGLI 1159	Greek Mythology (H9 901)	3
ENGLI 1160	Native American Literature (H3 910D)	3
ENGLI 1161	Multicultural Literatures of the U.S. (H3 910D)	3
ENGLI 1165	Literature, Gender, and Sexualities (H3 911D)	3
ENGLI 2220	British Literature to 1800 (H3 912)	3
ENGLI 2221	British Literature From 1800 Through The Present (H3 913)	3

ENGLI 2223	American Literature From the Colonial Period to the Civil War (H3 914)	3
ENGLI 2224	American Literature From the Civil War to the Present (H3 915)	3
ENGLI 2226	World Literature (H3 907)	3
ENGLI 2227	Modern European Literature (H3 907)	3
ENGLI 2228	Shakespeare (H3 905)	3
ENGLI 2262	Non-Western Literature (H3 908N)	3
<i>French</i>		
FRENC 2202	Intermediate French II (H1 900)	4
FRENC 2251	Conversation and Composition I (H1 900)	3
FRENC 2252	Conversation and Composition II (H1 900)	3
<i>German</i>		
GERMA 2202	Intermediate German II (H1 900)	4
GERMA 2251	Conversation and Composition I (H1 900)	3
GERMA 2252	Conversation and Composition II (H1 900)	3
<i>History</i>		
HISTO 1110	Foundations of the European World (H2 901)	3
HISTO 1120	Europe in the Modern World (H2 902)	3
HISTO 1160	World Civilization Since 1300 (H2 907)	3
HISTO 2205	History of Asia (H2 903N)	3
HISTO 2220	History and Culture of China (H2 903N)	3
HISTO 2225	History and Culture of Russia (H2 908)	3
HISTO 2230	History and Culture of Japan (H2 908)	3
HISTO 2235	20th Century World History (H2 903N)	3
HISTO 2245	History and Culture of England (H2 908)	3
<i>Humanities</i>		
HUMNT 1102	Introduction to Humanities: Ideas and Values (H9 900)	3
HUMNT 1103	Introduction to World Mythology (H9 901)	3
HUMNT 1104	Women in Arts: Cultural and Artistic Expressions of Gender (HF 907D)	3
HUMNT 1105	Humanities Beyond the U.S. & Europe (HF 904N) ¹	3
HUMNT 1110	The Arts and Cultural Diversity (HF 906D) ¹	3
HUMNT 1120	Introduction to Medical Humanities (H9 900)	3
HUMNT 1150	Intersections of Humanities, Math, And Science (H9 900)	3
<i>Italian</i>		
ITALI 2202	Intermediate Italian II (H1 900)	4
<i>Japanese</i>		
JAPAN 2202	Intermediate Japanese II (H1 900)	4
<i>Korean</i>		
KOREA 2202	Intermediate Korean II (H1 900)	4
<i>Philosophy</i>		
PHILO 1100	Introduction to Philosophy (H4 900)	3
PHILO 1110	Ethics (H4 904)	3
PHILO 1116	Environmental Ethics (H4 904)	3
PHILO 1120	Logic (H4 906)	3
PHILO 1125	Critical Thinking (H4 906)	3
PHILO 1150	World Religions (H5 904N)	3

PHILO 2010	Ancient Philosophy (H4 901)	3
PHILO 2011	Early Modern Philosophy (H4 902)	3
PHILO 2150	Philosophy of Religion (H4 905)	3
<i>Religious Studies</i>		
RELIG 1100	Introduction to Religion (H5 900)	3
RELIG 1110	Introduction to the Bible: Old Testament (H5 901)	3
RELIG 1120	Introduction to the Bible: New Testament (H5 901)	3
RELIG 1150	World Religions (H5 904N)	3
RELIG 2160	Judaism, Christianity and Islam (H5 901)	3
RELIG 2155	Asian Thought (H4 903N)	3
<i>Russian</i>		
RUSSI 2202	Intermediate Russian II (H1 900)	4
<i>Spanish</i>		
SPANI 2202	Intermediate Spanish II (H1 900)	4
SPANI 2206	Spanish for Heritage Speakers I (H1 900)	4
SPANI 2208	Spanish for Heritage Speakers II (H1 900)	4
SPANI 2251	Conversation and Composition I (H1 900)	3
SPANI 2252	Conversation and Composition II (H1 900)	3

Fine Arts

Code	Title	Credits
<i>Art</i>		
ART 1100	Introduction to Visual Art and Culture (F2 900)	3
ART 2211	Art Histories Before 1400 CE (F2 901)	3
ART 2212	Art Histories 1400 to 1950 (F2 902)	3
ART 2213	Art Histories Since 1950 (F2 902)	3
ART 2214	Non-Western Art (F2 903N)	3
<i>English</i>		
ENGLI 1135	Introduction to Film Art (F2 908)	3
ENGLI 1154	Film As Literature (HF 908) ¹	3
<i>Humanities</i>		
HUMNT 1101	Introduction to Humanities: The Arts (F9 900)	3
HUMNT 1104	Women in Arts: Cultural and Artistic Expressions of Gender (HF 907D)	3
HUMNT 1105	Humanities Beyond the U.S. & Europe (HF 904N) ¹	3
HUMNT 1110	The Arts and Cultural Diversity (HF 906D) ¹	3
<i>Theater</i>		
THEAT 1100	Theater Appreciation (F1 907)	3

¹ Interdisciplinary credit may be earned as either Fine Arts or Humanities. No Music courses may fulfill this requirement.

Social and Behavioral Sciences - 3 credits

Code	Title	Credits
<i>Anthropology</i>		
ANTHR 1000	Introduction to Anthropology (S1 900N)	3
ANTHR 1100	Cultural Anthropology (S1 901N)	3
ANTHR 1105	Practical Anthropology (S1 904D)	3
ANTHR 1130	People and Cultures of the World (S1 904D)	3

ANTHR 1200	Discovering Archaeology (S1 903)	3
ANTHR 1400	Race, Sex and Human Evolution (S1 902)	3
Economics		
ECONO 2200	Principles of Economics (S3 900)	3
ECONO 2201	Principles of Macroeconomics (S3 901)	3
ECONO 2202	Principles of Microeconomics (S3 902)	3
Geography		
GEOGR 1100	Western World Geography (S4 901)	3
GEOGR 1105	Eastern World Geography (S4 902N)	3
GEOGR 1120	Economic Geography (S4 903N)	3
GEOGR 1130	Cultural Geography (S4 900N)	3
History		
HISTO 1130	History of the United States to 1865 (S2 900)	3
HISTO 1140	History of the United States Since 1865 (S2 901)	3
HISTO 2210	History and Culture of Africa (S2 907N)	3
HISTO 2215	History and Culture of South Asia (S2 916N)	3
HISTO 2260	United States History Since 1945 (S2 901)	3
Political Science		
POLS 1100	Introduction to Political Science (S5 903)	3
POLS 1101	American Politics (S5 900)	3
POLS 1105	State and Local Politics (S5 902)	3
POLS 2203	Comparative Politics (S5 905)	3
POLS 2220	World Politics (S5 904N)	3
Psychology		
PSYCH 1100	General Psychology (S6 900)	3
PSYCH 2230	Developmental Psychology: Childhood and Adolescence (S6 903)	3
PSYCH 2233	Developmental Psychology: Adolescence (S6 904)	3
PSYCH 2235	Developmental Psychology: Adulthood (S6 905)	3
PSYCH 2237	Developmental Psychology: The Life Span (S6 902)	3
PSYCH 2240	Social Psychology (S8 900)	3
Sociology		
SOCIO 1100	Introduction to Sociology (S7 900)	3
SOCIO 1120	Sociology of Sex, Gender and Power (S7 904D)	3
SOCIO 2210	Social Problems (S7 901)	3
SOCIO 2215	Race and Racism in America (S7 903D)	3
SOCIO 2220	Sexual Relationships, Marriage & Family (S7 902)	3

Human Relations - One Course

Select one course from the Human Relations (p. 26) category.

Contemporary Life Skills or Global/Multicultural Studies - One Course

Select one course from the Contemporary Life Skills (p. 29) or Global/Multicultural Studies (p. 27) category.

Associate in General Studies Degree

Degree Requirements

(Total Minimum Credits Required: 60)

Each candidate for the Associate in General Studies (A.G.S.) degree shall:

- Select courses to complete the required credits from:
 - general education core requirement courses,
 - coursework in the Global/Multicultural or Contemporary Life Skills category,
 - Career/Technical Education courses, and
 - additional coursework to a minimum of 60 credits.
- Satisfactorily complete a minimum of 27 credits in general education (p.) courses as specified below.

a. Communication - 9 credits

Code	Title	Credits
Written		
ENGLI 1101	English Composition I	3
ENGLI 1102	English Composition II	3
Oral		
SPEEC 1100	Fundamentals of Speech Communication	3
	or SPEEC 1120 Small-Group Communication	
	or SPEEC 1150 Introduction to Business Communication	
Total Credits		9

- Physical and Life Sciences** - 3 to 5 credits
Select at least one course with a laboratory component.
 - Mathematics** - 3 to 5 credits
Select a minimum of 3 credits of 1000-level or higher (except MATH 1102 Mathematics for Health Sciences, MATH 1104 Mathematics for Horticulture, and MATH 1120 Mathematical Foundations for Diagnostic Medical Imaging Sonographers) to meet general education requirements. Only one of the following three statistics courses will count toward overall degree requirement credit: MATH 1635 Statistics, PSYCH 2280 Statistics/Social & Behavioral Sciences, or SOCIO 2205 Statistics for the Social and Behavioral Sciences. Only one of the following courses may count toward overall degree credit: MATH 1428 College Algebra With Applications or MATH 1431 Precalculus I.
 - Humanities and Fine Arts** - 6 credits
Select courses from at least two subject areas.
 - Social and Behavioral Sciences** - 6 credits
Select courses from at least two subject areas.
- Global/Multicultural Studies or Contemporary Life Skills** - 2 credits
Complete at least two credits from the Global/Multicultural Studies or Contemporary Life Skills category.
 - Select courses to complete the required minimum of 60 credits from general education courses, elective courses and Career/Technical Education courses to a maximum of 33 credits.
 - Satisfy graduation requirements (p.) for all associate degrees.
 - Earn no more than 42 credits by demonstrated competence through the Advanced Placement Program (AP), designated course-specific subject examinations of the College Level Examination Program

(CLEP), and the College of DuPage Proficiency Through an Instructor Program.

7. Earn no more than 16 credits in courses numbered 1800 or 2800, 1840 or 2840, 1820 to 1829, and 2820 to 2829, or labeled as independent study, experimental/pilot, selected topics or field/experiential.
8. Earn no more than 4 credits in Physical Education activity courses.
9. Earn no more than 12 credits with a satisfactory/fail grade option.
10. Earn no more than 6 credits from History, the Humanities and Fine Arts, and the Social and Behavioral Science categories combined. Additional credits in History may be earned as elective credit.

Associate in Science Degree Degree Requirements

(Total Minimum Credits Required: 60)

(A complete list of General Education Core Curriculum transfer courses is available at the Illinois Articulation Initiative website: <http://www.itransfer.org>).

Each candidate for an Associate in Science (A.S.) degree shall:

1. Select courses to complete the required credits from:
 - a. general education core requirement courses,
 - b. coursework in the Human Relations and Global/Multicultural Studies or Contemporary Life Skills categories,
 - c. additional mathematics and science requirements, and
 - d. additional coursework
(see *Notes* at end of A.S. degree) to a minimum of 60 credits.
2. Satisfactorily complete a minimum of 31 credits in General Education (p.) Core Curriculum (Illinois Articulation Initiative course codes are listed in parentheses after each course or sequence) in the Communication, Physical and Life Sciences, Mathematics, Humanities and Fine Arts, and Social and Behavioral Sciences categories as specified below.

- a. **Communication** - 9 credits

Code	Title	Credits
Writing		
ENGLI 1101	English Composition I (C1 900) ¹	3
ENGLI 1102	English Composition II (C1 901R) ¹	3
Oral		
SPEEC 1100	Fundamentals of Speech Communication (C2 900) ¹	3

¹ Grade of "C" or higher required.

- b. **Physical and Life Sciences** - 7 to 10 credits

Select one course from Life Sciences and one course from Physical Sciences. At least one course must have a laboratory component.

Code	Title	Credits
Life Sciences		
<i>Biology</i>		
BIOLO 1100	Survey of Biology (L1 900L)	4
BIOLO 1110	Environmental Biology (L1 905L)	4

BIOLO 1120	Introduction to Genetics (No Lab) (L1 906)	3
BIOLO 1130	Fundamentals of Biotechnology (L1 906L)	4
BIOLO 1151	Principles of Biological Science (L1 910L)	5

Physical Sciences

Chemistry

CHEMI 1105	Contemporary Chemistry (P1 903L)	4
CHEMI 1211	Survey of General Chemistry (P1 902L)	5
CHEMI 1551	Principles of Chemistry I (P1 902L)	5

Earth Science

EARTH 1101	Physical Geology of Earth's Interior (P1 907L)	4
EARTH 1102	Physical Geology of Earth's Surface (P1 907L)	4
EARTH 1105	Environmental Geology (P1 908L)	4
EARTH 1110	Introduction to Meteorology (P1 905L)	4
EARTH 1111	Climate and Global Change (No Lab) (P1 905)	3
EARTH 1115	Severe and Unusual Weather (P1 905L)	4
EARTH 1119	Weather Impacts and Preparedness (No Lab) (P1 905)	3
EARTH 1120	Introduction to Astronomy (No Lab) (P1 906)	3
EARTH 1122	Astronomy: The Solar System (P1 906L)	4
EARTH 1124	Astronomy: Stars and Galaxies (P1 906L)	4
EARTH 1126	Observational Astronomy (P1 906L)	3
EARTH 1130	Introduction to Oceanography (P1 905L)	4
	or EARTH 1131 Fundamentals of Oceanography	
EARTH 1135	Water Science-Fundamentals of Hydrology (P1 905L)	4
EARTH 1140	Fundamentals of Earth Science (P1 905L)	4
	or EARTH 1141 Introduction to Earth Science	

Physics

PHYSI 1100	Physics (P1 900L)	4
PHYSI 1150	Energy and Society (P1 901)	3
PHYSI 1180	Quarks to Cosmos: Discoveries in the Modern Era	3
PHYSI 1201	General Physics I (P1 900L)	5
PHYSI 2111	Physics for Science and Engineering I (P2 900L)	5

- c. **Mathematics** - 3 to 5 credits

Code	Title	Credits
Mathematics		
MATH 1218	General Education Mathematics (M1 904)	3
MATH 1220	Quantitative Literacy (M1 901)	3
MATH 1322	Mathematics for Elementary School Teachers II (M1 903)	3

MATH 1533	Finite Mathematics (M1 906)	4
MATH 1635	Statistics (M1 902) ¹	4
MATH 2000	Survey of Calculus (M1 900-O)	3
MATH 2115	Discrete Mathematics (M1 905)	3
MATH 2134	Calculus for Business and Social Science (M1 900-B)	4
MATH 2231	Calculus and Analytic Geometry I (M1 900-1)	5
MATH 2232	Calculus and Analytic Geometry II (M1 900-2)	5
MATH 2233	Calculus and Analytic Geometry III (M1 900-3)	4
Psychology		
PSYCH 2280	Statistics/Social & Behavioral Sciences (M1 902) ¹	3
Sociology		
SOCIO 2205	Statistics for the Social and Behavioral Sciences (M1 902) ¹	3

¹ Only one from these three courses may count toward overall degree requirement credit.

d. **Humanities and Fine Arts** - 6 credits

Select at least one course from Humanities and at least one course from Fine Arts.

Humanities

Code	Title	Credits
<i>Chinese</i>		
CHINE 2202	Intermediate Chinese II (H1 900)	4
<i>English</i>		
ENGLI 1130	Introduction to Literature (H3 900)	3
ENGLI 1150	Short Fiction (H3 901)	3
ENGLI 1151	Novel (H3 901)	3
ENGLI 1152	Poetry (H3 903)	3
ENGLI 1153	Drama (H3 902)	3
ENGLI 1154	Film As Literature (HF 908) ¹	3
ENGLI 1157	Children's Literature (H3 918)	3
ENGLI 1158	Bible As Literature (H5 901)	3
ENGLI 1159	Greek Mythology (H9 901)	3
ENGLI 1160	Native American Literature (H3 910D)	3
ENGLI 1161	Multicultural Literatures of the U.S. (H3 910D)	3
ENGLI 1165	Literature, Gender, and Sexualities (H3 911D)	3
ENGLI 2220	British Literature to 1800 (H3 912)	3
ENGLI 2221	British Literature From 1800 Through The Present (H3 913)	3
ENGLI 2223	American Literature From the Colonial Period to the Civil War (H3 914)	3
ENGLI 2224	American Literature From the Civil War to the Present (H3 915)	3
ENGLI 2226	World Literature (H3 907)	3
ENGLI 2227	Modern European Literature (H3 907)	3
ENGLI 2228	Shakespeare (H3 905)	3
ENGLI 2262	Non-Western Literature (H3 908N)	3

<i>French</i>		
FRENC 2202	Intermediate French II (H1 900)	4
FRENC 2251	Conversation and Composition I (H1 900)	3
FRENC 2252	Conversation and Composition II (H1 900)	3
<i>German</i>		
GERMA 2202	Intermediate German II (H1 900)	4
GERMA 2251	Conversation and Composition I (H1 900)	3
GERMA 2252	Conversation and Composition II (H1 900)	3
<i>History</i>		
HISTO 1110	Foundations of the European World (H2 901)	3
HISTO 1120	Europe in the Modern World (H2 902)	3
HISTO 1160	World Civilization Since 1300 (H2 907)	3
HISTO 2205	History of Asia (H2 903N)	3
HISTO 2220	History and Culture of China (H2 903N)	3
HISTO 2225	History and Culture of Russia (H2 908)	3
HISTO 2230	History and Culture of Japan (H2 908)	3
HISTO 2235	20th Century World History (H2 903N)	3
HISTO 2245	History and Culture of England (H2 908)	3
<i>Humanities</i>		
HUMNT 1102	Introduction to Humanities: Ideas and Values (H9 900)	3
HUMNT 1103	Introduction to World Mythology (H9 901)	3
HUMNT 1104	Women in Arts: Cultural and Artistic Expressions of Gender (HF 907D)	3
HUMNT 1105	Humanities Beyond the U.S. & Europe (HF 904N)	3
HUMNT 1110	The Arts and Cultural Diversity (HF 906D) ¹	3
HUMNT 1120	Introduction to Medical Humanities (H9 900)	3
HUMNT 1150	Intersections of Humanities, Math, And Science (H9 900)	3
<i>Italian</i>		
ITALI 2202	Intermediate Italian II (H1 900)	4
<i>Japanese</i>		
JAPAN 2202	Intermediate Japanese II (H1 900)	4
<i>Korean</i>		
KOREA 2202	Intermediate Korean II (H1 900)	4
<i>Motion Picture/Television</i>		
MPTV 1154	Film As Literature (HF 908)	3
<i>Philosophy</i>		
PHILO 1100	Introduction to Philosophy (H4 900)	3
PHILO 1110	Ethics (H4 904)	3
PHILO 1116	Environmental Ethics (H4 904)	3
PHILO 1120	Logic (H4 906)	3
PHILO 1125	Critical Thinking (H4 906)	3
PHILO 1150	World Religions (H5 904N)	3

PHILO 2010	Ancient Philosophy (H4 901)	3
PHILO 2011	Early Modern Philosophy (H4 902)	3
PHILO 2150	Philosophy of Religion (H4 905)	3
PHILO 2155	Asian Thought (H4 903N)	3

Religious Studies

RELIG 1100	Introduction to Religion (H5 900)	3
RELIG 1110	Introduction to the Bible: Old Testament (H5 901)	3
RELIG 1120	Introduction to the Bible: New Testament (H5 901)	3
RELIG 1150	World Religions (H5 904N)	3
RELIG 2155	Asian Thought (H4 903N)	3
RELIG 2160	Judaism, Christianity and Islam (H5 901)	3

Russian

RUSSE 2202	Intermediate Russian II (H1 900)	4

Spanish

SPANI 2202	Intermediate Spanish II (H1 900)	4
SPANI 2206	Spanish for Heritage Speakers I (H1 900)	4
SPANI 2208	Spanish for Heritage Speakers II (H1 900)	4
SPANI 2251	Conversation and Composition I (H1 900)	3
SPANI 2252	Conversation and Composition II (H1 900)	3

Fine Arts

Code	Title	Credits
Art		
ART 1100	Introduction to Visual Art and Culture (F2 900)	3
ART 2211	Art Histories Before 1400 CE (F2 901)	3
ART 2212	Art Histories 1400 to 1950 (F2 902)	3
ART 2213	Art Histories Since 1950 (F2 902)	3
ART 2214	Non-Western Art (F2 903N)	3

English

ENGLI 1135	Introduction to Film Art (F2 908)	3
ENGLI 1145	Film History (F2 909)	3
ENGLI 1154	Film As Literature (HF 908) ¹	3

Humanities

HUMNT 1101	Introduction to Humanities: The Arts (F9 900)	3
HUMNT 1104	Women in Arts: Cultural and Artistic Expressions of Gender (HF 907D)	3
HUMNT 1105	Humanities Beyond the U.S. & Europe (HF 904N) ¹	3
HUMNT 1110	The Arts and Cultural Diversity (HF 906D) ¹	3

Motion Picture/Television

MPTV 1135	Introduction to Film Art (F2 908)	3
MPTV 1145	Film History (F2 909)	3
MPTV 1154	Film As Literature (HF 908)	3

Music

MUSIC 1100	Music Appreciation (F1 900)	3
MUSIC 1104	Introduction to American Music (F1 904)	3
MUSIC 1115	Introduction to World Music (F1 903N)	3

Theater

THEAT 1100	Theater Appreciation (F1 907)	3

¹ Interdisciplinary credit (HF) may be earned as either Fine Arts or Humanities.

e. Social and Behavioral Sciences - 6 credits

Courses must be selected from at least two disciplines.

Code	Title	Credits
Anthropology		
ANTHR 1000	Introduction to Anthropology (S1 900N)	3
ANTHR 1100	Cultural Anthropology (S1 901N)	3
ANTHR 1105	Practical Anthropology (S1 904D)	3
ANTHR 1130	People and Cultures of the World (S1 904D)	3
ANTHR 1200	Discovering Archaeology (S1 903)	3
ANTHR 1400	Race, Sex and Human Evolution (S1 902)	3
Economics		
ECONO 2200	Principles of Economics (S3 900)	3
ECONO 2201	Principles of Macroeconomics (S3 901)	3
ECONO 2202	Principles of Microeconomics (S3 902)	3
Geography		
GEOGR 1100	Western World Geography (S4 901)	3
GEOGR 1105	Eastern World Geography (S4 902N)	3
GEOGR 1120	Economic Geography (S4 903N)	3
GEOGR 1130	Cultural Geography (S4 900N)	3
GEOGR 1140	Urban Geography (S4 901)	3
History		
HISTO 1130	History of the United States to 1865 (S2 900)	3
HISTO 1140	History of the United States Since 1865 (S2 901)	3
HISTO 2210	History and Culture of Africa (S2 907N)	3
HISTO 2215	History and Culture of South Asia (S2 916N)	3
HISTO 2242	African-American History (S2 923D)	3
HISTO 2260	United States History Since 1945 (S2 901)	3
Political Science		
POLS 1100	Introduction to Political Science (S5 903)	3
POLS 1101	American Politics (S5 900)	3
POLS 1105	State and Local Politics (S5 902)	3
POLS 2203	Comparative Politics (S5 905)	3
POLS 2220	World Politics (S5 904N)	3
Psychology		
PSYCH 1100	General Psychology (S6 900)	3

PSYCH 2230	Developmental Psychology: Childhood and Adolescence (S6 903)	3
PSYCH 2233	Developmental Psychology: Adolescence (S6 904)	3
PSYCH 2235	Developmental Psychology: Adulthood (S6 905)	3
PSYCH 2237	Developmental Psychology: The Life Span (S6 902)	3
PSYCH 2240	Social Psychology (S8 900)	3
Sociology		
SOCIO 1100	Introduction to Sociology (S7 900)	3
SOCIO 1120	Sociology of Sex, Gender and Power (S7 904D)	3
SOCIO 2210	Social Problems (S7 901)	3
SOCIO 2215	Race and Racism in America (S7 903D)	3
SOCIO 2220	Sexual Relationships, Marriage & Family (S7 902)	3

3. Fulfill these requirements in the categories specified

- Complete at least one course from the Human Relations (p. 26) category.
- Complete at least one course from the Global/Multicultural Studies (p. 27) or Contemporary Life Skills (p. 29) category.

4. Additional Mathematics and Science requirements. Select at least two courses from Physical and Life Sciences and at least one course from Mathematics.

a. **Physical and Life Sciences**

Select at least two courses with a minimum total of 6 credits.

Code	Title	Credits
Anatomy and Physiology		
ANAT 1500	Survey of Human Anatomy and Physiology	4
ANAT 1551	Human Anatomy and Physiology I	4
ANAT 1552	Human Anatomy and Physiology II	4
ANAT 1571	Anatomy and Physiology With Cadaver I	4
ANAT 1572	Anatomy and Physiology With Cadaver II	4
BIOLO 1130	Fundamentals of Biotechnology ¹	4
BIOLO 1151	Principles of Biological Science ¹	5
BIOLO 1152	Principles of Biological Science	5
BIOLO 1200	Introduction to Animal Research in the Field	2-3
BIOLO 2150	Ecology	4
BIOLO 2151	Cell Biology	4
Botany		
BOTAN 1310	Ethnobotany	4
BOTAN 1320	Prairie Ecology	4
BOTAN 2350	Introduction to Botany	4
BOTAN 2360	Local Flora	3
Microbiology		
MICRO 1420	Microbiology ¹	4
Zoology		
ZOOLO 1220	Insects and Humans	3

ZOOLO 2250	Comparative Vertebrate Zoology	4
ZOOLO 2260	Invertebrate Zoology	4
Chemistry		
CHEMI 1212	Survey of Organic Chemistry	5
CHEMI 1552	Principles of Chemistry II	5
CHEMI 2213	Introduction to Biochemistry With Laboratory	4
CHEMI 2551	Organic Chemistry I	5
CHEMI 2552	Organic Chemistry II	5
Earth Science		
EARTH 1101	Physical Geology of Earth's Interior ¹	4
EARTH 1102	Physical Geology of Earth's Surface ¹	4
EARTH 1105	Environmental Geology ¹	4
EARTH 1110	Introduction to Meteorology ¹	4
EARTH 1111	Climate and Global Change ¹	3
EARTH 1115	Severe and Unusual Weather ¹	4
EARTH 1116	Weather Analysis and Forecasting I	1
EARTH 1117	Weather Analysis and Forecasting II	1
EARTH 1119	Weather Impacts and Preparedness ¹	3
EARTH 1120	Introduction to Astronomy ¹	3
EARTH 1122	Astronomy: The Solar System ¹	4
EARTH 1124	Astronomy: Stars and Galaxies ¹	4
EARTH 1126	Observational Astronomy ¹	3
EARTH 1130	Introduction to Oceanography ¹	4
	or EARTH 1131 Fundamentals of Oceanography	
EARTH 1135	Water Science-Fundamentals of Hydrology ¹	4
EARTH 1140	Fundamentals of Earth Science ¹	4
	or EARTH 1141 Introduction to Earth Science	
EARTH 2102	Origin and Evolution of the Earth	4
EARTH 2103	Geologic Field Investigations	3
EARTH 2110	Intermediate Meteorology	4
EARTH 2115	Mesoscale Meteorology	4
EARTH 2116	Adv Weather Analysis & Forecasting I	1
EARTH 2117	Adv Weather Analysis & Forecasting II	1
EARTH 2118	Severe Weather Lab	1
Physics		
PHYSI 1150	Energy and Society ¹	3
PHYSI 1202	General Physics II	5
PHYSI 2111	Physics for Science and Engineering I ¹	5
PHYSI 2112	Physics for Science and Engineering II	5
PHYSI 2115	Physics for Science and Engineering III	4

¹ Courses also meet general education requirements. If any of these courses is chosen to fulfill requirements for the General Education Core Curriculum, choose others to meet the Additional Mathematics and Science Requirements.

b. **Mathematics**

Select at least one course with a minimum total of 3 credits.

Code	Title	Credits
MATH 1218	General Education Mathematics ¹	3
MATH 1220	Quantitative Literacy ¹	3

MATH 1321	Mathematics for Elementary School Teachers I	4
MATH 1322	Mathematics for Elementary School Teachers II ¹	3
MATH 1340	History of Mathematics	3
MATH 1428	College Algebra With Applications	3
MATH 1431	Precalculus I	5
MATH 1432	Precalculus II: Trigonometry	3
MATH 1533	Finite Mathematics ¹	4
MATH 1635	Statistics ¹	4
MATH 2115	Discrete Mathematics ¹	3
MATH 2134	Calculus for Business and Social Science ¹	4
MATH 2231	Calculus and Analytic Geometry I ¹	5
MATH 2232	Calculus and Analytic Geometry II ¹	5
MATH 2233	Calculus and Analytic Geometry III ¹	4
MATH 2245	Linear Algebra	4
MATH 2270	Differential Equations	4
MATH 2300	Mathematical Proof	3

¹ Courses also meet general education requirements. If any of these courses is chosen to fulfill requirements for the General Education Core Curriculum, choose others to meet the Additional Mathematics and Science Requirements.

Select courses to complete the required 60 credits from General Education Core Curriculum courses, elective courses (p.), and up to 10 credits in Career/Technical Education courses.

Program (CLEP), and the College of DuPage Proficiency Through an Instructor Program.

15. Earn the remaining credits in courses that normally apply to a bachelor's degree as indicated in the transfer program guides.

Notes: For help in choosing additional coursework beyond the General Education Core to fulfill this degree, students should consult a Student Success Counselor or Program Advisor from their area of interest for suggestions regarding course selection from the range of offerings in a specific field of study.

There is no guarantee that elective or Career/Technical Education courses will transfer as specific course equivalents to a baccalaureate-granting institution or other colleges.

The transferability of these courses needs to be validated with a transfer institution.

Degree-seeking students should complete the General Education Core Curriculum and required sequence courses before transfer to another participating IAI institution to guarantee the completion of lower division general education coursework.

5. Satisfy graduation requirements (p.) for all associate degrees.
6. Earn no more than 6 credits in History in the Humanities and Fine Arts and Social and Behavioral Sciences categories combined for general education credit. Additional credits in History from general education or other categories may be earned as elective credit, unless restricted by degree requirements.
7. Earn no more than 4 credits in Physical Education activity courses.
8. Only one of the following courses may count toward the degree: MATH 1428 College Algebra With Applications or MATH 1431 Precalculus I.
9. Complete a minimum of two courses with a minimum of 6 credits in Physical and Life Sciences from the Additional Mathematics and Science Requirements category.
10. Complete a minimum of one course with a minimum of 3 credits in Mathematics from the Additional Mathematics and Science Requirements category.
11. Earn no more than 16 credits in courses numbered 1800 or 2800, 1840 or 2840, 1820 to 1829, and 2820 to 2829, or labeled as independent study, experimental/pilot, selected topics or field/experiential.
12. Earn no more than 12 credits with a satisfactory/fail grade option in courses counted toward elective credit.
13. Earn General Education Core Curriculum course credit with letter grades, not satisfactory/fail grades.
14. Earn no more than 42 credits for the Communication, Physical and Life Sciences, Mathematics, Humanities and Fine Arts, and Social and Behavioral Sciences categories by demonstrated competence through the Advanced Placement Program (AP), designated course-specific subject examinations of the College Level Examination

AREAS OF STUDY

- Accountancy (p. 61)
 - Accountancy, A.A.S. (<https://catalog.cod.edu/programs-study/accountancy/accountancy-aas/>)
 - Accounting Specialist, Certificate (<https://catalog.cod.edu/programs-study/accountancy/accounting-specialist-certificate/>)
 - Accounting Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/accountancy/accounting-transfer-pathway-aa/>)
 - Advanced Accounting, Certificate (p. 61)
 - Bookkeeping, Certificate (p. 61)
 - Income Tax Preparer, Certificate (<https://catalog.cod.edu/programs-study/accountancy/income-tax-preparer-certificate/>)
 - Paraprofessional Accountant, Certificate (p. 61)
- American Sign Language Interpreting (p. 62)
 - American Sign Language Interpreter, A.A.S. (p. 62)
 - American Sign Language Interpreting, Certificate (p. 62)
 - American Sign Language, Certificate (p. 62)
- Anthropology (p. 63)
 - Anthropology Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/anthropology/anthropology-transfer-pathway-aa/>)
 - Anthropology Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/anthropology/anthropology-transfer-pathway-as/>)
 - Business Anthropology, Certificate (p. 63)
- Applied Technology (p. 63)
 - Project Hire Ed Apprenticeship, Certificate (p. 63)
- Architecture (p. 64)
 - Architectural Rendering, Certificate (p. 64)
 - Architectural Technology, Certificate (p. 65)
 - Architectural Technology-CADD, A.A.S. (p. 65)
 - Construction Management, A.A.S. (p. 65)
 - Construction Management, Certificate (p. 66)
 - Pre-Architecture Technology, A.A.S. (p. 66)
 - Pre-Architecture, Certificate (p. 67)
- Automotive Service Technology (p. 67)
 - Automotive Service Management, Certificate (p. 67)
 - Electric Vehicle Technology, Certificate (<https://catalog.cod.edu/programs-study/automotive-service-technology/electric-vehicle-technology-certificate/>)
 - Entry Level Automotive Service Technology, Certificate (p. 67)
 - Master Automotive Service Technology Advanced Certificate (p. 68)
 - Master Automotive Service Technology, A.A.S. (p. 68)
- Aviation Technology (p. 69)
 - Aviation Management, A.A.S. (p. 69)
- Biochemistry (<https://catalog.cod.edu/programs-study/biochemistry/>)
 - Biochemistry Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/biochemistry/biochemistry-transfer-pathway-as/>)
- Biology (<https://catalog.cod.edu/programs-study/biology/>)
 - Biology Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/biology/biology-transfer-pathway-as/>)
- Business (<https://catalog.cod.edu/programs-study/business/>)
 - Business Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/business/business-transfer-pathway-aa/>)
- Central Sterile Processing Distribution (p. 69)
 - Central Sterile Processing Distribution Technician, Certificate (p. 69)
- Chemistry (<https://catalog.cod.edu/programs-study/chemistry/>)
 - Chemistry Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/chemistry/chemistry-transfer-pathway-as/>)
- Chinese (<https://catalog.cod.edu/programs-study/chinese/>)
 - Chinese Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/chinese/chinese-transfer-pathway-aa/>)
- Computer and Information Science (p. 70)
 - Application and Technical Support Specialist, A.A.S. (p. 70)
 - Business Intelligence Analysis, Certificate (<https://catalog.cod.edu/programs-study/computer-information-science/business-intelligence-analysis-certificate/>)
 - Business Productivity Software, Certificate (p. 70)
 - C++ Language Proficiency, Certificate (p. 71)
 - Data Analytics, Certificate (p. 71)
 - Database, Certificate (<https://catalog.cod.edu/programs-study/computer-information-science/database-certificate/>)
 - Game Design and Development, Certificate (p. 71)
 - Game Development, A.A.S. (<https://catalog.cod.edu/programs-study/computer-information-science/game-development-aas/>)
 - Game Programming and Development, Certificate (p. 71)
 - Internet of Things (IoT) Proficiency, Certificate (p. 72)
 - iOS Developer Proficiency, Certificate (p. 72)
 - JAVA Language Proficiency, Certificate (p. 72)
 - LINUX, Certificate (p. 72)
 - Machine Learning, Certificate (<https://catalog.cod.edu/programs-study/computer-information-science/machine-learning-certificate/>)
 - Python Language Proficiency, Certificate (p. 72)
 - Software Development, A.A.S. (p. 73)
 - UNIX Proficiency, Certificate (p. 74)
 - Visual BASIC Language Proficiency, Certificate (p. 74)
 - Web Client Developer, Certificate (p. 75)
 - Web Development, A.A.S. (p. 75)
 - Web Programmer, Certificate (p. 75)
 - Windows Network Administration, Certificate (p. 75)
- Computer and Information Technology (p. 76)
 - CIT CCNA, Certificate (p. 76)
 - CIT Network Associate Security, Certificate (<https://catalog.cod.edu/programs-study/computer-information-technology/cit-network-associate-security-certificate/>)
 - CIT Networking Professional, Certificate (p. 76)
 - CompTIA A+ and Network+ PC Technician, Certificate (p. 76)
 - Computer and Information Technology, A.A.S. (p. 76)
 - Computer and Internetworking Technologies, Certificate (p. 77)
 - Cybersecurity and Defense, A.A.S. (p. 77)
 - Cybersecurity Specialist, Certificate (p. 78)
 - Enterprise System Administrator, Certificate (p. 78)
 - System Support Specialist, Certificate (p. 78)
 - Voice Over IP Telephony, Certificate (p. 78)

- Cosmetology (p. 78)
 - Cosmetology, A.A.S. (p. 79)
 - Cosmetology, Certificate (p. 79)
 - Nail Technology, Certificate (p. 79)
- Criminal and Justice Studies (p. 124)
 - Criminal Justice Transfer Pathway, AA (<https://catalog.cod.edu/programs-study/justice-studies/criminal-justice-transfer-pathway-aa/>)
 - Criminal Justice, AAS (p. 124)
- Culinary Arts (p. 80)
 - Baking and Pastry Arts, A.A.S. (p. 80)
 - Baking and Pastry Arts, Certificate (p. 80)
 - Culinary Arts, A.A.S. (p. 80)
 - Culinary Arts, Certificate (p. 81)
 - Culinology and Food Science, A.A.S. (p. 81)
- Dance (<https://catalog.cod.edu/programs-study/dance/>)
 - Dance Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/dance/dance-transfer-pathway-aa/>)
- Dental Hygiene (p. 82)
 - Dental Hygiene, A.A.S. (p. 82)
- Diagnostic Medical Imaging Nuclear Medicine (p. 83)
 - Computed Tomography (CT), Certificate (p. 83)
 - Nuclear Medicine Technology, Certificate (p. 83)
- Diagnostic Medical Imaging Radiography (p. 83)
 - Diagnostic Medical Imaging Radiography, A.A.S. (p. 83)
 - Mammography, Certificate (p. 84)
- Diagnostic Medical Imaging Sonography (p. 84)
 - Diagnostic Medical Imaging Sonography (Ultrasound), Certificate (p. 85)
 - Diagnostic Medical Imaging Sonography, A.A.S. (p. 85)
 - Diagnostic Medical Vascular Sonography, Certificate (p. 86)
- Early Childhood Education and Care (p. 86)
 - Early Childhood Administration, A.A.S. (p. 86)
 - Early Childhood Education and Care Administrator, Certificate (p. 87)
 - Early Childhood Education and Care Advanced, Certificate (p. 87)
 - Early Childhood Education and Care, A.A.S. (p. 88)
 - Early Childhood Education and Care, Certificate (p. 87)
 - Family Child Care Provider, Certificate (p. 88)
 - Infant, Toddler and Two-Year Old Child Care, Certificate (p. 88)
 - Multicultural Education and Care for the Young Child, Certificate (p. 89)
 - School-Age Child Care, Certificate (p. 89)
- Earth Science (p. 89)
 - Astronomy Transfer Pathway, AS (<https://catalog.cod.edu/programs-study/earth-science/earth-science-astronomy-transfer-pathway-as/>)
 - Earth Science Transfer Pathway, AS (<https://catalog.cod.edu/programs-study/earth-science/exploring-earth-science-transfer-pathway-as/>)
 - Geology Transfer Pathway, AS (<https://catalog.cod.edu/programs-study/earth-science/earth-science-geology-transfer-pathway-as/>)
- Meteorology Transfer Pathway, AS (<https://catalog.cod.edu/programs-study/earth-science/earth-science-meteorology-transfer-pathway-as/>)
- Weather Hazards and Preparedness, Certificate (p. 89)
- Economics (<https://catalog.cod.edu/programs-study/economics/>)
 - Economics Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/economics/economics-transfer-pathway-aa/>)
 - Economics Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/economics/economics-transfer-pathway-as/>)
- Education (p. 90)
 - Education Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/education/education-transfer-pathway-aa/>)
 - Paraprofessional in Education, Certificate (p. 90)
 - Teaching Online Utilizing Technology (TOUT), Certificate (p. 90)
- Electro-Mechanical Technology (p. 90)
 - Advanced Mechatronics, Certificate (p. 90)
 - Electrician Apprenticeship, A.A.S. (p. 91)
 - Electrician's Preparation, Certificate (p. 91)
 - Electro-Mechanical Technology, A.A.S. (p. 91)
 - Mechanical Maintenance, Certificate (p. 92)
 - Mechatronics Technology (MET), Certificate (p. 92)
 - Process Control Instrumentation, Certificate (p. 92)
 - Programmable Logic Controllers in Automation, Certificate (p. 93)
- Electronics Technology (p. 93)
 - Advanced Electronics Technology, Certificate (p. 93)
 - Biomedical Engineering Technology, A.A.S. (p. 93)
 - Electronics Engineering Technology, A.A.S. (p. 94)
 - Electronics Technology, Certificate (p. 94)
 - Industrial Controls and Automation, Certificate (p. 94)
 - Renewable Energy Technology, Certificate (p. 95)
- Engineering (<https://catalog.cod.edu/programs-study/engineering/>)
 - Bioengineering Transfer Pathway, A.E.S. (<https://catalog.cod.edu/programs-study/engineering/bio-engineering-transfer-pathway-aes/>)
 - Chemical Engineering Transfer Pathway, A.E.S. (<https://catalog.cod.edu/programs-study/engineering/chemical-engineering-transfer-pathway-aes/>)
 - Civil Engineering Transfer Pathway, A.E.S. (<https://catalog.cod.edu/programs-study/engineering/civil-engineering-transfer-pathway-aes/>)
 - Computer Engineering Transfer Pathway, A.E.S. (<https://catalog.cod.edu/programs-study/engineering/computer-engineering-transfer-pathway-aes/>)
 - Electrical Engineering Transfer Pathway, A.E.S. (<https://catalog.cod.edu/programs-study/engineering/electrical-engineering-transfer-pathway-aes/>)
 - Industrial Engineering Transfer Pathway, A.E.S. (<https://catalog.cod.edu/programs-study/engineering/industrial-engineering-transfer-pathway-aes/>)
 - Mechanical Engineering Transfer Pathway, A.E.S. (<https://catalog.cod.edu/programs-study/engineering/mechanical-engineering-transfer-pathway-aes/>)
- English (p. 95)

- Creative Writing, Certificate (p. 95)
- English Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/english/english-transfer-pathway-aa/>)
- Professional Writing, Certificate (p. 97)
- Eye Care Assistant (p. 97)
 - Eye Care Assistant, Certificate (p. 97)
- Fashion Studies (p. 97)
 - Fashion Design, A.A.S. (p. 97)
 - Fashion Design, Certificate (p. 98)
 - Fashion Entrepreneurship, Certificate (p. 98)
 - Fashion Merchandising, A.A.S. (p. 98)
 - Fashion Merchandising, Certificate (p. 99)
- Fire Science (p. 99)
 - Emergency Medical Services, A.A.S. (p. 99)
 - Emergency Medical Technician, Certificate (p. 100)
 - Fire Fighter, Certificate (p. 100)
 - Fire Science Technology, A.A.S. (p. 100)
 - Paramedic, Certificate (p. 101)
 - Public Safety Telecommunicator, Certificate (<https://catalog.cod.edu/programs-study/fire-science/public-safety-telecommunicator-certificate/>)
- French (<https://catalog.cod.edu/programs-study/french/>)
 - French Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/french/french-transfer-pathway-aa/>)
- Geography (p. 101)
 - Geographic Information Systems, Certificate (p. 101)
 - Geography Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/geography/geography-transfer-pathway-aa/>)
- German (<https://catalog.cod.edu/programs-study/german/>)
 - German Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/german/german-transfer-pathway-aa/>)
- Graphic Design (p. 102)
 - Graphic Design Foundation, Certificate (p. 102)
 - Graphic Design, A.A.S. (p. 102)
 - Interactive Media, A.A.S. (p. 103)
 - Web Design, Certificate (p. 103)
- Health Information Technology (p. 103)
 - Health Information Technology, A.A.S. (p. 103)
 - Medical Billing, Certificate (<https://catalog.cod.edu/programs-study/health-information-technology/medical-billing-certificate/>)
 - Physician Coding, Certificate (<https://catalog.cod.edu/programs-study/health-information-technology/physician-coding-certificate/>)
- Health Sciences (p. 104)
 - Non-Invasive Electrocardiography Technician, Certificate (p. 104)
 - Pharmacy Technician, Certificate (p. 105)
 - Phlebotomy, Certificate (p. 105)
- Hearing Instrument Dispensary (p. 105)
 - Hearing Instrument Dispensary Program, Certificate (p. 105)
- Heating, Ventilation, Air Conditioning and Refrigeration (p. 105)
 - Building Automation Systems (BAS), Certificate (p. 106)
 - Energy Audit and Analysis, Certificate (p. 106)
 - Entry Level HVACR, Certificate (<https://catalog.cod.edu/programs-study/heating-ventilation-air-conditioning-refrigeration/entry-level-hvacr-certificate/>)
- Facility Maintenance Mechanic, A.A.S. (p. 106)
- Heating, Air Conditioning and Refrigeration Service Technician, A.A.S. (p. 107)
- HVACR Contractor, A.A.S. (p. 107)
- Service Technician, Certificate (p. 108)
- Stationary Operator, Certificate (p. 108)
- History (<https://catalog.cod.edu/programs-study/history/>)
 - History Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/history/history-transfer-pathway-aa/>)
- Horticulture (p. 108)
 - Advanced Horticultural Therapy, Certificate (<https://catalog.cod.edu/programs-study/horticulture/advanced-horticultural-therapy-certificate/>)
 - Cannabis and Industrial Hemp Cultivation and Operations, Certificate (<https://catalog.cod.edu/programs-study/horticulture/cannabis-and-industrial-hemp-cultivation-and-operations-certificate/>)
 - Floral Shop Management, Certificate (p. 108)
 - Greenhouse Management, Certificate (p. 109)
 - Horticultural Therapy, Certificate (<https://catalog.cod.edu/programs-study/horticulture/horticultural-therapy-certificate/>)
 - Horticulture, A.A.S. (p. 109)
 - Horticulture, Certificate (p. 111)
 - Landscape and Turf Maintenance, Certificate (p. 111)
 - Landscape Contracting and Management, A.A.S. (p. 111)
 - Landscape Design and Construction, Certificate (p. 112)
 - Nursery and Garden Center Management, Certificate (p. 112)
 - Power Equipment and Technology, Certificate (p. 113)
 - Sustainable Landscapes, Certificate (p. 113)
 - Sustainable Urban Agriculture, A.A.S. (p. 113)
 - Sustainable Urban Agriculture, Certificate (p. 114)
 - Urban Farming, Certificate (<https://catalog.cod.edu/programs-study/horticulture/urban-farming-certificate/>)
- Hospitality Management (p. 114)
 - Gastronomy and Marketing in Hospitality, Certificate (<https://catalog.cod.edu/programs-study/hospitality-management/gastronomy-marketing-hospitality-certificate/>)
 - Hospitality Foundations, Certificate (p. 114)
 - Hospitality Management Operations, Certificate (p. 115)
 - Hospitality Management, AAS (p. 115)
 - Hospitality Sales and Marketing, Certificate (p. 115)
 - Meeting and Event Planning, Certificate (p. 116)
 - Meeting and Events Planning, AAS (p. 116)
 - Resort Management, Certificate (p. 116)
 - Restaurant Management, AAS (p. 116)
 - Restaurant Management, Certificate (p. 117)
 - Travel and Tourism Foundations, Certificate (p. 117)
 - Travel and Tourism Professional, Certificate (p. 117)
 - Travel and Tourism, AAS (p. 118)
 - Wedding Planning Management, Certificate (p. 118)
 - Wine Appreciation and Knowledge, Certificate (p. 118)
- Human Services (p. 118)
 - Addictions Counseling, A.A.S. (p. 119)
 - Addictions Counseling, Certificate (p. 119)

- Applied Gerontology, Certificate (p. 119)
- Co-occurring Disorders, Certificate (p. 120)
- Corrections Counseling, Certificate (p. 120)
- Developmental Disabilities, Certificate (p. 120)
- Human Services Domestic/Family Violence, Certificate (p. 120)
- Human Services Generalist, Certificate (p. 121)
- Human Services, A.A.S. (p. 121)
- Recovery Support Specialist, Certificate (<https://catalog.cod.edu/programs-study/human-services/recovery-support-specialist-certificate/>)
- Residential Child Care, Certificate (p. 121)
- Veteran Counseling, Certificate (p. 122)
- Integrated Engineering Technology (p. 122)
 - Integrated Mechatronics and Manufacturing Technology, A.A.S. (p. 122)
- Interdisciplinary Studies (<https://catalog.cod.edu/programs-study/interdisciplinary-studies/>)
 - Interdisciplinary Studies Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/interdisciplinary-studies/interdisciplinary-studies-aa/>)
- Interior Design (p. 122)
 - Interior Design Computer Applications, Certificate (p. 123)
 - Interior Design Lighting, Certificate (p. 123)
 - Interior Design, A.A.S. (p. 123)
 - Kitchen and Bath Design, Certificate (p. 124)
- Italian (<https://catalog.cod.edu/programs-study/italian/>)
 - Italian Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/italian/italian-transfer-pathway-aa/>)
- Japanese (<https://catalog.cod.edu/programs-study/japanese/>)
 - Japanese Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/japanese/japanese-transfer-pathway-aa/>)
- Korean (<https://catalog.cod.edu/programs-study/korean/>)
 - Korean Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/korean/korean-transfer-pathway-aa/>)
- Legal Studies (<https://catalog.cod.edu/programs-study/legal-studies/>)
 - Legal Studies, A.A.S. (<https://catalog.cod.edu/programs-study/legal-studies/legal-studies-aas/>)
 - Paralegal, Certificate (<https://catalog.cod.edu/programs-study/legal-studies/paralegal-certificate/>)
- Library and Information Technology (p. 125)
 - Library and Information Technology, A.A.S. (p. 125)
 - Library and Information Technology, Certificate (p. 125)
- Long Term Care Administration (p. 125)
 - Long-Term Care Administration, Certificate (p. 126)
- Magnetic Resonance Imaging Technology (p. 126)
 - Magnetic Resonance Imaging Advanced Certificate (p. 126)
- Management (p. 126)
 - Business Environment and Concepts, Certificate (p. 126)
 - Entrepreneurship, Certificate (p. 127)
 - Human Resource Management (HRM), Certificate (p. 127)
 - Management, A.A.S. (p. 127)
 - Management, Certificate (p. 128)
 - Organizational Leadership, Certificate (p. 128)
 - Supervision, Certificate (p. 128)
- Manufacturing Technology (p. 128)
 - Automated Manufacturing Systems, A.A.S. (p. 128)
 - Automated Manufacturing Systems, Certificate (p. 129)
 - CNC Job Readiness, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/cnc-job-readiness-certificate/>)
 - CNC Operations, Certificate (p. 129)
 - Computer-Aided Design, Certificate (p. 130)
 - Drafting/Design, Certificate (p. 130)
 - Manufacturing Engineering Technology, A.A.S. (p. 130)
 - Manufacturing Skills Standards, Certificate (p. 131)
 - Manufacturing Technology Drafting/Design, A.A.S. (p. 131)
 - Manufacturing Technology, A.A.S. (p. 132)
 - Manufacturing Technology, Certificate (p. 132)
 - Mold Making, Certificate (p. 133)
 - Tool and Die Making, Certificate (p. 133)
- Marketing (p. 133)
 - Consumer Marketing, Certificate (p. 133)
 - Digital and Social Media Marketing, Certificate (p. 134)
 - Marketing, A.A.S. (p. 134)
 - Marketing, Certificate (p. 134)
- Mathematics (<https://catalog.cod.edu/programs-study/mathematics/>)
 - Mathematics Transfer Pathway, A.A. and A.S. (<https://catalog.cod.edu/programs-study/mathematics/mathematics-transfer-pathway-aa-as/>)
- Medical Assistant (p. 134)
 - Health Care Office Assistant, Certificate (<https://catalog.cod.edu/programs-study/medical-assistant/healthcare-office-assistant-certificate/>)
 - Medical Assistant, A.A.S. (p. 135)
 - Medical Assistant, Certificate (p. 135)
- Motion Picture/Television (p. 136)
 - Animation, A.A.S. (p. 136)
 - Animation, Certificate (p. 136)
 - Digital Broadcast Journalism, A.A.S. (p. 137)
 - Film/Video Production, A.A.S. (p. 137)
 - Media Literacy, Journalism, and Production, Certificate (<https://catalog.cod.edu/programs-study/motion-picture-television/media-literacy-journalism-production-certificate/>)
 - Motion Picture/Television, Certificate (p. 138)
 - Television Production, A.A.S. (p. 138)
- Music (p. 138)
 - Audio Production, Certificate (p. 139)
 - Music Business, A.A.S. (p. 139)
 - Music, A.F.A. Music (<https://catalog.cod.edu/programs-study/music/afa-music/>)
- Nursing (p. 139)
 - Nursing, A.A.S. (p. 140)
 - Practical Nursing (PN), Certificate (p. 140)
- Nursing Assistant (<https://catalog.cod.edu/programs-study/nursing-assistant/>)
 - Certified Nursing Assistant (CNA), Certificate (<https://catalog.cod.edu/programs-study/nursing-assistant/certified-nursing-assistant-cna-certificate/>)
- Office Technology Information (p. 140)

- Administrative Support and Meeting/Event Planning, A.A.S. (<https://catalog.cod.edu/programs-study/office-technology-information/administrative-support-meeting-event-planning-aas/>)
- Administrative Support and Meeting/Event Planning, Certificate (<https://catalog.cod.edu/programs-study/office-technology-information/administrative-support-meeting-event-planning-certificate/>)
- Administrative Support Essentials, Certificate (p. 141)
- Administrative Support Specialist, A.A.S. (p. 141)
- Administrative Support Specialist, Certificate (p. 141)
- Executive Assistant, A.A.S. (p. 142)
- Medical Office, Certificate (p. 142)
- Office Technology Specialist, Certificate (p. 142)
- Word Specialist, Certificate (p. 142)
- Ophthalmic Technician (p. 143)
 - Ophthalmic Technician, A.A.S. (p. 143)
- Patient Care Technician (<https://catalog.cod.edu/programs-study/patient-care-technician/>)
 - Patient Care Technician, Certificate (<https://catalog.cod.edu/programs-study/patient-care-technician/patient-care-technician-certificate/>)
- Philosophy (<https://catalog.cod.edu/programs-study/philosophy/>)
 - Philosophy Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/philosophy/philosophy-transfer-pathway-aa/>)
- Photography (p. 143)
 - Digital Photography, Certificate (<https://catalog.cod.edu/programs-study/photography/digital-photography-certificate/>)
 - Photography Technology, A.A.S. (p. 144)
 - Photography Technology, Certificate (p. 143)
- Physical Education, Fitness, and Sports Studies (p. 144)
 - Fitness Instructor, Certificate (p. 145)
 - Kinesiology and Fitness Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/physical-education/kinesiology-fitness-track-transfer-pathway-aa/>)
 - Kinesiology and Fitness Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/physical-education/kinesiology-fitness-track-transfer-pathway-as/>)
 - Physical Education Teaching and Coaching Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/physical-education/coaching-transfer-pathway-aa/>)
 - Sports Management Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/physical-education/sports-management-transfer-pathway-aa/>)
- Physical Therapist Assistant (p. 145)
 - Physical Therapist Assistant, A.A.S. (p. 145)
- Physics (<https://catalog.cod.edu/programs-study/physics/>)
 - Physics Transfer Pathway, A.E.S. (<https://catalog.cod.edu/programs-study/physics/physics-transfer-pathway-aes/>)
- Political Science (<https://catalog.cod.edu/programs-study/political-science/>)
 - Political Science Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/political-science/political-science-transfer-pathway-aa/>)
- Pre-Pharmacy (<https://catalog.cod.edu/programs-study/pre-pharmacy/>)
 - Pre-Pharmacy Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/pre-pharmacy/pre-pharmacy-transfer-pathway-as/>)
- Psychology (<https://catalog.cod.edu/programs-study/psychology/>)
 - Psychology Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/psychology/psychology-transfer-pathway-aa/>)
- Radiation Therapy (p. 146)
 - Radiation Therapy, Certificate (p. 146)
- Religious Studies (<https://catalog.cod.edu/programs-study/religious-studies/>)
 - Religious Studies Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/religious-studies/religious-studies-transfer-pathway-aa/>)
- Respiratory Care (p. 146)
 - Respiratory Care, A.A.S. (p. 147)
- Russian (<https://catalog.cod.edu/programs-study/russian/>)
 - Russian Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/russian/russian-transfer-pathway-aa/>)
- Sociology (p. 147)
 - Sociology Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/sociology/sociology-transfer-pathway-aa/>)
- Spanish (<https://catalog.cod.edu/programs-study/spanish/>)
 - Spanish Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/spanish/spanish-transfer-pathway-aa/>)
- Speech Communication (<https://catalog.cod.edu/programs-study/speech-communication/>)
 - Speech Communication Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/speech-communication/speech-communication-transfer-pathway-aa/>)
- Speech Language Pathology (p. 147)
 - Speech-Language Pathology Assistant, A.A.S. (p. 147)
- Still Deciding/Undecided (<https://catalog.cod.edu/programs-study/undecided/>)
 - Still Deciding/Undecided Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/undecided/undecided-aa/>)
- Surgical First Assistant (p. 148)
 - Surgical First Assistant, Certificate (p. 148)
- Surgical Technology (p. 148)
 - Surgical Technology, A.A.S. (p. 148)
- Theater (<https://catalog.cod.edu/programs-study/theater/>)
 - Technical Theater Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/theater/theater-technical-transfer-pathway-aa/>)
 - Theater Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/theater/theater-transfer-pathway-aa/>)
- Welding Technology (p. 149)
 - AWS Sense 1, Certificate (p. 149)
 - Welding Technology, A.A.S. (p. 149)
 - Welding, Certificate (p. 150)

Accountancy

Area of Study

For more information about Accountancy, please visit the program page (<http://www.cod.edu/accounting/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Accountancy, A.A.S. (<https://catalog.cod.edu/programs-study/accountancy/accountancy-aas/>)
- Accounting Specialist, Certificate (<https://catalog.cod.edu/programs-study/accountancy/accounting-specialist-certificate/>)
- Accounting Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/accountancy/accounting-transfer-pathway-aa/>)
- Advanced Accounting, Certificate (p. 61)
- Bookkeeping, Certificate (p. 61)
- Income Tax Preparer, Certificate (<https://catalog.cod.edu/programs-study/accountancy/income-tax-preparer-certificate/>)
- Paraprofessional Accountant, Certificate (p. 61)

Advanced Accounting, Certificate

The Advanced Accounting Certificate provides an in-depth study of accounting for students needing to meet the educational requirements to qualify for the Certified Public Accountant Examination. It is also for business professionals seeking an in-depth analysis of accounting for career advancement. This certificate provides advanced coverage of intermediate accounting, managerial cost accounting, individual and corporate income tax, auditing, data analytics, ethics, and research and communication.

For more information about Accountancy, please visit the program page (<http://www.cod.edu/accounting/>).

Certificate Requirements

Field of Study Code: ACCOU.CER.ADV

Code	Title	Credits
Program Requirements		
ACCOU 2140	Financial Accounting	4
ACCOU 2150	Managerial Accounting	4
ACCOU 2205	Federal Taxation I	3
ACCOU 2206	Federal Taxation II	3
ACCOU 2241	Intermediate Accounting I	4
ACCOU 2242	Intermediate Accounting II	4
ACCOU 2271	Auditing I	3
Program Electives		
Select two of the following:		6-7
ACCOU 2160	Introductory Data Analytics for Accounting	
ACCOU 2200	Income Tax Return Preparation	
ACCOU 2251	Cost Accounting	
ACCOU 2260	Advanced Accounting	
ACCOU 2265	Governmental & Not-For-Profit Accounting	

ACCOU 2272	Auditing II
ACCOU 2290	Accounting Research
Total Credits	31-32

Bookkeeping, Certificate

Prepares students to work with an organization's financial accounts, including recording and analyzing financial information, preparing financial reports, and processing payroll.

For more information about Accountancy, please visit the program page (<http://www.cod.edu/accounting/>).

Certificate Requirements

Field of Study Code: ACCOU.CER.BKKP

Code	Title	Credits
ACCOU 1110	Accounting Procedures	3
or ACCOU 2140	Financial Accounting	
ACCOU 1160	Payroll Accounting	3
ACCOU 1176	QuickBooks Online	2
ACCOU 1186	Applications of Quickbooks Online	2
CIS 1221	Data Analysis with Spreadsheets	3
Total Credits		13

Paraprofessional Accountant, Certificate

The Paraprofessional Accountant Certificate prepares students for positions in bookkeeping, accounting, payroll, or tax preparation services under the direction of a Certified Public Accountant (CPA).

For more information about Accountancy, please visit the program page (<http://www.cod.edu/accounting/>).

Certificate Requirements

Field of Study Code: ACCOU.CER.PARA

Code	Title	Credits
Program Requirements		
ACCOU 1110	Accounting Procedures	3
or ACCOU 2140	Financial Accounting	
ACCOU 1120	Income Tax Fundamentals	2
or ACCOU 2205	Federal Taxation I	
ACCOU 1160	Payroll Accounting	3
ACCOU 1176	QuickBooks Online	2
ACCOU 1186	Applications of Quickbooks Online	2
ACCOU 2160	Introductory Data Analytics for Accounting	3
or CIS 1221	Data Analysis with Spreadsheets	
ACCOU 2200	Income Tax Return Preparation	3
Total Credits		18

American Sign Language Interpreting

Area of Study

For more information about American Sign Language Interpreting, please visit the program page (<http://www.cod.edu/american-sign-language/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- American Sign Language Interpreter, A.A.S. (p. 62)
- American Sign Language Interpreting, Certificate (p. 62)
- American Sign Language, Certificate (p. 62)

American Sign Language Interpreter, A.A.S.

The **American Sign Language Interpreter degree** will prepare students for a career working as a sign language interpreter for people who are Deaf and hard of hearing. This degree combines both the 21 credit hour certificate of American Sign Language proficiency as well as the 24 credit hour certificate in American Sign Language Interpreting and provides instruction in communication models and processes of American Sign Language, Deaf culture, interpreting skills, ethical understanding, and hands-on training in oral and manual interpreting in a wide range of situations. This degree also requires completion of 19 to 22 general education credit hours. Successful completion of this program will prepare students for certification examinations conducted by the State of Illinois and national accrediting agencies. This degree requires a minimum of 64 credits in program requirements and general education in the courses listed below.

For more information about American Sign Language Interpreting, please visit the program page (<http://www.cod.edu/american-sign-language/>).

Degree Requirements

Field of Study Code: ASLI.AAS

Code	Title	Credits
Program Requirements		
SIGN 1101	American Sign Language I	3
SIGN 1102	American Sign Language II	3
SIGN 1103	Fingerspelling and Numbers in ASL/ Interpreting	3
SIGN 1104	Cultural Perspective of the Deaf Community	3
SIGN 2101	American Sign Language III	3
SIGN 2102	Linguistics and Grammatical Aspects of American Sign Language	3
SIGN 2103	American Sign Language IV	3
INTP 2104	Introduction to American Sign Language Interpreting and Ethics	3
INTP 2105	ASL/English Skills Development	4

INTP 2106	Cognitive Processing ASL/English	4
INTP 2107	Translating from ASL to English/English to ASL	4
INTP 2108	Consecutive & Simultaneous Interpreting	4
INTP 2109	Educational Interpreting and Transliterating	3
INTP 2110	American Sign Language Interpreter Practicum	2
General Education		
Select 19 to 22 credits ¹		19-22
Total Credits		64-67

¹ In addition to the courses listed above.

American Sign Language Interpreting, Certificate

The **American Sign Language Interpreting certificate** provides instruction in communication models and processes of American Sign Language, Deaf culture, interpreting skills, ethical understanding, and hands-on training in oral and manual interpreting in a wide range of situations. Successful completion of this certificate or degree program will prepare students for certification examinations conducted by the State of Illinois and national accrediting agencies. This certificate requires 24 credits in the courses listed below.

For more information about American Sign Language Interpreting, please visit the program page (<http://www.cod.edu/american-sign-language/>).

Certificate Requirements

Field of Study Code: ASLI.CER.INTP

Code	Title	Credits
INTP 2104	Introduction to American Sign Language Interpreting and Ethics	3
INTP 2105	ASL/English Skills Development	4
INTP 2106	Cognitive Processing ASL/English	4
INTP 2107	Translating from ASL to English/English to ASL	4
INTP 2108	Consecutive & Simultaneous Interpreting	4
INTP 2109	Educational Interpreting and Transliterating	3
INTP 2110	American Sign Language Interpreter Practicum	2
Total Credits		24

American Sign Language, Certificate

The **American Sign Language certificate** provides the language and cultural foundation for competency in American Sign Language as well as preparation for the certificate in American Sign Language Interpreting. Students who successfully complete this certificate may apply for selective enrollment in the American Sign Language Interpreting Certificate. This certificate requires 21 credits in the courses listed below.

For more information about American Sign Language Interpreting, please visit the program page (<http://www.cod.edu/american-sign-language/>).

Certificate Requirements

Field of Study Code: ASLI.CER.SIGN

Code	Title	Credits
SIGN 1101	American Sign Language I	3
SIGN 1102	American Sign Language II	3
SIGN 1103	Fingerspelling and Numbers in ASL/ Interpreting	3
SIGN 1104	Cultural Perspective of the Deaf Community	3
SIGN 2101	American Sign Language III	3
SIGN 2102	Linguistics and Grammatical Aspects of American Sign Language	3
SIGN 2103	American Sign Language IV	3
Total Credits		21

Anthropology

Area of Study

For more information about Anthropology, please visit the program page (<http://www.cod.edu/anthropology/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Business Anthropology, Certificate (p. 63)
- Anthropology Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/anthropology/anthropology-transfer-pathway-aa/>)
- Anthropology Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/anthropology/anthropology-transfer-pathway-as/>)

Business Anthropology, Certificate

The **Business Anthropology certificate** is designed to increase the marketability of individuals interested in working in cross- cultural and international work environments by sharpening interpersonal and critical-thinking skill-sets as it relates to working in these environments. In addition, the Business Anthropology certificate will provide a competitive advantage for students seeking placement in a four-year college for applied anthropology. The four classes will cover a broad range of anthropological topics including methods, business anthropology, and cultural anthropology, with a focus on holism (understanding how various aspects of a society are integrated such as family, gender roles, economics, religion and politics), critical thinking and problem solving. The program emphasizes a practical, interdisciplinary, real world approach to anthropology with the purpose of attaining employment outside of academia. This certificate requires 14 credits in the courses listed below.

For more information about Anthropology, please visit the program page (<http://www.cod.edu/anthropology/>).

Certificate Requirements

Field of Study Code: ANTHR.CER.BUSIN

Code	Title	Credits
ANTHR 1100	Cultural Anthropology	3
ANTHR 1110	Business Anthropology	3
ANTHR 2100	Introduction to Anthropological Methods	4
ANTHR 2210	Field Experience/Applied Anthropology	4
Total Credits		14

Applied Technology

Area of Study

For more information about Applied Technology, please visit the program page (<https://cod.edu/project-hire-ed/apprenticeship.aspx>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Project Hire Ed Apprenticeship, Certificate (p. 63)

Project Hire Ed Apprenticeship, Certificate

This certificate program will allow students an opportunity to pursue multiple apprenticeship opportunities. Students will gain exposure to multiple career paths in multiple industries. Students will complete program requirements and then select 6 courses from the emphasis tracks. Students may work with a faculty member to develop a custom emphasis track.

For more information about Applied Technology, please visit the program page (<https://cod.edu/project-hire-ed/apprenticeship.aspx>).

Degree Requirements

Field of Study Code: APTEC.CER.PHEA

Code	Title	Credits
Program Requirements		
APTEC 1100 or APTEC 1001	Project Hire Ed Seminar Survey of Technical Education	1-3
HVACR 1105 or MANUF 2280	Introduction to Safety, Materials and Equipment Industrial Safety	2-3
BUSIN 1111	Customer Service	3
ENGLI 1105 or ENGLI 1101	Workplace Writing English Composition I	3
OFTI 1200	Microsoft 365 for Business Professionals	3
Emphasis Courses		18
<i>Electro-Mechanical/Mechatronics Track</i>		

ELECT 1100	Electricity and Electronics Fundamentals
ELMEC 1110	Motor & Generator Fundamentals
ELMEC 1141	Hydraulics and Pneumatics
ELMEC 1190	Intro to Programmable Logic Controllers
ELMEC 2410	Programmable Controller II (PLC II)
ELMEC 2510	Process and Automation Controls

Industrial Maintenance Track

ELMEC 1190	Intro to Programmable Logic Controllers
HVACR 1110	Introduction to Electricity and Hvacr Controls
HVACR 2110	Facility Electrical Systems
HVACR 2242	Mechanical Systems
MANUF 1151	Machine Shop I
WELD 1100	Welding I

Manufacturing Machining Track

MANUF 1101	Industrial Design/CAD
MANUF 1110	Metrology
MANUF 1121	Physical Metallurgy
MANUF 1151	Machine Shop I
MANUF 1153	Advanced Machine Processes
MANUF 2202	Solid Modeling and Design

Manufacturing CNC Track

MANUF 1101	Industrial Design/CAD
MANUF 1110	Metrology
MANUF 1151	Machine Shop I
MANUF 2202	Solid Modeling and Design
MANUF 2251	Computer Numerical Control (CNC)
MANUF 2252	CNC Operations
MANUF 2253	Computer-Aided Manufacturing (CAM)

HVACR Service Track

HVACR 1100	Refrigeration Principles
HVACR 1105	Introduction to Safety, Materials and Equipment
HVACR 1108	Refrigerant Certification
HVACR 1110	Introduction to Electricity and Hvacr Controls
HVACR 1181	Heating Principles
HVACR 2180	Residential and Light Commercial Forced-Air Heating
HVACR 2202	Commercial Air Conditioning

Facility Maintenance Track

HVACR 1100	Refrigeration Principles
HVACR 1105	Introduction to Safety, Materials and Equipment
HVACR 1108	Refrigerant Certification
HVACR 1110	Introduction to Electricity and Hvacr Controls
HVACR 1181	Heating Principles
HVACR 2180	Residential and Light Commercial Forced-Air Heating
HVACR 2202	Commercial Air Conditioning

Welding Technology Track

MANUF 1121	Physical Metallurgy

WELD 1100	Welding I
WELD 1112	Oxy-Fuel, Welding, Plasma Cutting and Brazing
WELD 1122	Shielded Arc Welding (SMAW)
WELD 1132	Metal Inert Gas (MIG) Carbon Steel Welding
WELD 1142	Gas Tungsten Arc (TIG)

Total Credits**30-33**

Architecture

Area of Study

For more information about Architecture, please visit the program page (<http://www.cod.edu/architecture/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Architectural Rendering, Certificate (p. 64)
- Architectural Technology, Certificate (p. 65)
- Architectural Technology-CADD, A.A.S. (p. 65)
- Construction Management, A.A.S. (p. 65)
- Construction Management, Certificate (p. 66)
- Pre-Architecture Technology, A.A.S. (p. 66)
- Pre-Architecture, Certificate (p. 67)

Architectural Rendering, Certificate

The **Architectural Rendering certificate** gives students specific skills for preparing professional architectural presentations in a variety of media. Students should have a background in architecture or art. This certificate is not appropriate as an independent credential but should be used to enhance a primary degree in architecture or illustration.

For more information about Architecture, please visit the program page (<http://www.cod.edu/architecture/>).

Certificate Requirements

Field of Study Code: ARCH.CER.REND

Code	Title	Credits
ARCH 1121	Architectural Design Communication	4
ARCH 1211	Basic Computer-Aided Drafting-AutoCAD	3
ARCH 1411	Introduction to BIM-Revit	3
ARCH 2220	Architectural Computer Modeling	2
PHOTO 1101	Foundations of Digital Photography	3
Total Credits		15

Architectural Technology, Certificate

The **Architectural Technology certificate** prepares students for entry level positions as drafters in architectural or construction firms.

For more information about Architecture, please visit the program page (<http://www.cod.edu/architecture/>).

Certificate Requirements

Field of Study Code: ARCH.CER.ARCH

Code	Title	Credits
ARCH 1101	Basic Architectural Drafting	3
ARCH 1111	Building Materials	4
ARCH 1211	Basic Computer-Aided Drafting-AutoCAD	3
ARCH 1411	Introduction to BIM-Revit	3
ARCH 1412	Advanced BIM-Revit	2-3
or ARCH 2220	Architectural Computer Modeling	
ARCH 2102	Detailing and Construction Documents	4
ARCH 2210	Mechanical, Electrical, & Plumb Systems	3
ARCH 2230	Structural Systems	3
ARCH 2240	Codes, Specifications and Contracts	3
ARCH 2260	Construction Estimating	3
Total Credits		31-32

Architectural Technology-CADD , A.A.S.

The **Architectural Technology –CADD degree** includes the core group of architecture courses as well as courses designed to prepare students for immediate entry into the workplace as a drafter.

For more information about Architecture, please visit the program page (<http://www.cod.edu/architecture/>).

Degree Requirements

Field of Study Code: ARCH.AAS.CADD

Code	Title	Credits
Program Requirements		
ARCH 1100	Introduction to Architecture	3
ARCH 1101	Basic Architectural Drafting	3
ARCH 1111	Building Materials	4
ARCH 1121	Architectural Design Communication	4
ARCH 1131	Introduction to Architectural Design	4
ARCH 1211	Basic Computer-Aided Drafting-AutoCAD	3
ARCH 1411	Introduction to BIM-Revit	3
ARCH 2102	Detailing and Construction Documents	4
ARCH 2210	Mechanical, Electrical, & Plumb Systems	3
ARCH 2220	Architectural Computer Modeling	2
ARCH 2230	Structural Systems	3
ARCH 2240	Codes, Specifications and Contracts	3
ENGLI 1101	English Composition I	3

MATH 1431	Precalculus I	5
PHYSI 1201	General Physics I	5

Program Electives

Select six credits from the following: ¹ 6

ARCH 1412	Advanced BIM-Revit	
ARCH 2260	Construction Estimating	
ARCH 2270	Construction Scheduling	
ARCH 2413	BIM Management-Revit	
ARCH 2840	Experimental/Pilot Class	

General Education

Select nine credits ¹ 9

Total Credits 67

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Construction Management, A.A.S.

The **Construction Management degree** combines a variety of architecture and business classes to prepare students for entry-level positions in construction management and construction firms or for transfer to other institutions.

For more information about Architecture, please visit the program page (<http://www.cod.edu/architecture/>).

Degree Requirements

Field of Study Code: ARCH.AAS.CONST

Code	Title	Credits
Program Requirements		
ARCH 1111	Building Materials	4
ARCH 1130	Blueprint Reading	2
ARCH 1141	Construction Methods I	2
ARCH 1301	Introduction to Construction Management	3
ARCH 2142	Construction Methods II	2
ARCH 2150	Basic Surveying	2
ARCH 2240	Codes, Specifications and Contracts	3
ARCH 2260	Construction Estimating	3
ARCH 2270	Construction Scheduling	3
ARCH 2413	BIM Management-Revit	3
ACCOU 2140	Financial Accounting	4
ENGLI 1101	English Composition I	3
MANAG 1100	Supervision	3
MATH 1115	Technical Mathematics I	3-5
or MATH 1431	Precalculus I	
PHILO 1114	Business Ethics	3
ARCH 1240	Construction Safety Fundamentals	2
PHYSI 1201	General Physics I	5
Program Electives		
Select eight credits from the following: ¹		8

ARCH 1100	Introduction to Architecture	
ARCH 1101	Basic Architectural Drafting	
ARCH 1211	Basic Computer-Aided Drafting-AutoCAD	
ARCH 1411	Introduction to BIM-Revit	
ARCH 1412	Advanced BIM-Revit	
ARCH 2102	Detailing and Construction Documents	
ARCH 2210	Mechanical, Electrical, & Plumb Systems	
ARCH 2230	Structural Systems	
ENGLI 1102	English Composition II	
	or ENGLI 1105 Workplace Writing	
	or MATH 1635 Statistics	
General Education		
Select six credits ²		6
Total Credits		64-66

¹ Students are required to take 6-8 credits based on their math class. The degree totals 64 credits. Students may take only one class from ENGLI 1102 English Composition II, ENGLI 1105 Workplace Writing and MATH 1635 Statistics.

² In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Construction Management, Certificate

The **Construction Management certificate** includes a range of technical architecture classes with basic business topics to give students a first level credential in the construction management field. The certificate prepares students for entry-level positions in construction firms and can serve as the first step to completing the AAS degree in Construction Management. It is especially suited to students who have construction experience or already have a degree in another field. This certificate requires 32 credits in the courses listed below.

For more information about Architecture, please visit the program page (<http://www.cod.edu/architecture/>).

Certificate Requirements

Field of Study Code: ARCH.CER.CONST

Code	Title	Credits
ARCH 1111	Building Materials	4
ARCH 1130	Blueprint Reading	2
ARCH 1141	Construction Methods I	2
ARCH 1301	Introduction to Construction Management	3
ARCH 2142	Construction Methods II	2
ARCH 2150	Basic Surveying	2
ARCH 2240	Codes, Specifications and Contracts	3
ARCH 2260	Construction Estimating	3
ARCH 2270	Construction Scheduling	3
ARCH 2413	BIM Management-Revit	3
MANAG 1100	Supervision	3

ARCH 1240	Construction Safety Fundamentals	2
Total Credits		32

Pre-Architecture Technology, A.A.S.

The **Pre-Architecture Technology degree** includes the core group of architecture courses as well as courses designed to prepare students for transfer to baccalaureate or professional programs. The second year curriculum emphasizes portfolio production while the electives allow students to customize their curriculum to match the transfer institution.

For more information about Architecture, please visit the program page (<http://www.cod.edu/architecture/>).

Degree Requirements

Field of Study Code: ARCH.AAS.PRE

Code	Title	Credits
Program Requirements		
ARCH 1100	Introduction to Architecture	3
ARCH 1111	Building Materials	4
ARCH 1121	Architectural Design Communication	4
ARCH 1131	Introduction to Architectural Design	4
ARCH 1211	Basic Computer-Aided Drafting-AutoCAD	3
ARCH 2201	Architectural Design I	5
ARCH 2202	Architectural Design II	5
ARCH 2203	Introduction to Architectural Theory	3
ARCH 2220	Architectural Computer Modeling	2
ARCH 2250	Architectural Presentation and Portfolio	3
ENGLI 1101	English Composition I	3
Select one of the following:		3
SPEEC 1100	Fundamentals of Speech Communication	
SPEEC 1120	Small-Group Communication	
SPEEC 1150	Introduction to Business Communication	
PHYSI 1201	General Physics I	5
MATH 2231	Calculus and Analytic Geometry I	4-5
or MATH 2134	Calculus for Business and Social Science	

Program Electives

Select nine hours from the following to align with transfer school requirements:		9
ARCH 1101	Basic Architectural Drafting	
ARCH 1411	Introduction to BIM-Revit	
ARCH 1412	Advanced BIM-Revit	
ARCH 2102	Detailing and Construction Documents	
ARCH 2210	Mechanical, Electrical, & Plumb Systems	
ARCH 2230	Structural Systems	
ENGLI 1102	English Composition II	

General Education		
Select six credits of Humanities and Social and Behavioral Sciences requirements		6
Total Credits		66-67

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Pre-Architecture, Certificate

The **Pre-Architecture certificate** provides students with the group of classes commonly required for transfer to an architectural program. This certificate requires a minimum of 34 credits in program requirements, program electives and general education in the courses listed below.

For more information about Architecture, please visit the program page (<http://www.cod.edu/architecture/>).

Certificate Requirements

Field of Study Code: ARCH.CER.PRE

Code	Title	Credits
Program Requirements		
ARCH 1100	Introduction to Architecture	3
ARCH 1121	Architectural Design Communication	4
ARCH 1131	Introduction to Architectural Design	4
ARCH 2201	Architectural Design I	5
ARCH 2250	Architectural Presentation and Portfolio	3
Program Electives		
Select two of the following based on transfer institution requirements: ¹		6
ARCH 1211	Basic Computer-Aided Drafting-AutoCAD	
ARCH 1411	Introduction to BIM-Revit	
ARCH 2202	Architectural Design II	
ARCH 2203	Introduction to Architectural Theory	
ARCH 2220	Architectural Computer Modeling	
General Education		
Select 10 credits minimum based on transfer institution requirements ¹		10
Total Credits		35

¹ Requires approval by architecture advisor.

Automotive Service Technology

Area of Study

For more information about Automotive Service Technology, please visit the program page (<http://www.cod.edu/automotive/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Automotive Service Management, Certificate (p. 67)
- Electric Vehicle Technology, Certificate (<https://catalog.cod.edu/programs-study/automotive-service-technology/electric-vehicle-technology-certificate/>)
- Entry Level Automotive Service Technology, Certificate (p. 67)

- Master Automotive Service Technology Advanced Certificate (p. 68)
- Master Automotive Service Technology, A.A.S. (p. 68)

Automotive Service Management, Certificate

Automotive service manager and service advisor skills will be emphasized. Repair orders will be covered in detail, including how to calculate labor, parts and other fees. Proper terminology and best practice for writing a work order will be covered. Customer service skills including communication skills, service consulting, customer relations, and making the sale will be covered. Safety compliance, employee management, expenses and general shop management will also be covered. The **Automotive Service Management certificate** requires 21 credits in the courses listed below.

For more information about Automotive Service Technology, please visit the program page (<http://www.cod.edu/automotive/>).

Certificate Requirements

Field of Study Code: AUTO.CER.SERV

Code	Title	Credits
AUTO 1110	Engine Design and Operation	3
AUTO 1120	Manual Drive Train and Axles	3
AUTO 1131	Automotive Electrical I	3
AUTO 1140	Suspension, Steering and Alignment	3
AUTO 1301	Automotive Service Consulting	3
AUTO 1302	Automotive Service Management	3
MANAG 1100 or BUSIN 1161	Supervision Entrepreneurship	3
Total Credits		21

Entry Level Automotive Service Technology, Certificate

The Entry Level Automotive Service Technology Certificate is designed to prepare students for an entry level career in the automotive field. Students will learn foundational knowledge and skills in order to diagnose, service, and maintain vehicles. Upon successful completion of the program students will be prepared to take several of the Automotive Service Excellence (ASE) tests. The Automotive Service Technology Program is accredited by the Automotive Service Excellence Education Foundation (ASEEF).

For more information about Automotive Service Technology, please visit the program page (<http://www.cod.edu/automotive/>).

Certificate Requirements

Field of Study Code: AUTO.CER.ENTRY

Code	Title	Credits
Program Requirements		
AUTO 1110	Engine Design and Operation	3
AUTO 1120	Manual Drive Train and Axles	3
AUTO 1131	Automotive Electrical I	3

AUTO 1140	Suspension, Steering and Alignment	3
AUTO 1232	Automotive Electrical II	3
AUTO 1240	Braking Systems	3
AUTO 1250	Automotive Air Conditioning and Heating	3
AUTO 1261	Engine Controls & Emissions I	3
AUTO 2120	Automatic Transmission	3
AUTO 2280	Automotive Service	6

Program Electives

Select one or more credits from the following courses. 1

AUTO 1040	Automotive for Non-Majors
AUTO 1840	Independent Study
AUTO 2345	Automotive Hybrid Technology
AUTO 2364	Automotive ScanTool Usage & Exploration
AUTO 2365	Intro to Diesel Fuel Systems & Emissions
AUTO 2455	Electric Vehicles (EV) and Equipment
AUTO 2840	Experimental/Pilot Class
AUTO 2860	Internship (Career & Technical Ed)
WELD 1100	Welding I

Total Credits 34

Master Automotive Service Technology Advanced Certificate

The Master Automotive Service Technology Advanced Certificate is designed to prepare students for a career in the automotive field. Students will learn both foundational and advanced automotive systems in order to diagnose, service, and maintain vehicles. Upon successful completion of the program students will be prepared to take Automotive Service Excellence (ASE) tests. The Automotive Service Technology Program is accredited by Automotive Service Excellence Education Foundation (ASEEF).

For more information about Automotive Service Technology, please visit the program page (<http://www.cod.edu/automotive/>).

Certificate Requirements

Field of Study Code: AUTO.CER.ADV

Code	Title	Credits
Program Requirements		
AUTO 1110	Engine Design and Operation	3
AUTO 1120	Manual Drive Train and Axles	3
AUTO 1131	Automotive Electrical I	3
AUTO 1140	Suspension, Steering and Alignment	3
AUTO 1232	Automotive Electrical II	3
AUTO 1240	Braking Systems	3
AUTO 1250	Automotive Air Conditioning and Heating	3
AUTO 1261	Engine Controls & Emissions I	3
AUTO 2120	Automatic Transmission	3
AUTO 2133	Automotive Electrical III	3
AUTO 2140	Advanced Chassis Systems	3
AUTO 2162	Engine Controls and Emissions II	3
AUTO 2220	Advanced Automotive Drivetrains	3
AUTO 2280	Automotive Service	6

Program Electives

Select one or more credits from the following: 1

AUTO 2365	Intro to Diesel Fuel Systems & Emissions
AUTO 2455	Electric Vehicles (EV) and Equipment
WELD 1100	Welding I

Total Credits 46

Master Automotive Service Technology, A.A.S.

The Automotive Service Technology program is designed to prepare students for a career in the automotive field and help propel individuals with career advancement. Students will learn skills in diagnosing, servicing, and maintaining today's sophisticated vehicles. Upon successful completion of the program, students will be prepared to take the Automotive Service Excellence (ASE) Tests. The Automotive Service Technology Program is accredited by Automotive Service Excellence Education Foundation (ASEEF).

For more information about Automotive Service Technology, please visit the program page (<http://www.cod.edu/automotive/>).

Degree Requirements

Field of Study Code: AUTO.AAS.MSTR

Code	Title	Credits
Program Requirements		
AUTO 1110	Engine Design and Operation	3
AUTO 1120	Manual Drive Train and Axles	3
AUTO 1131	Automotive Electrical I	3
AUTO 1140	Suspension, Steering and Alignment	3
AUTO 1232	Automotive Electrical II	3
AUTO 1240	Braking Systems	3
AUTO 1250	Automotive Air Conditioning and Heating	3
AUTO 1261	Engine Controls & Emissions I	3
AUTO 2120	Automatic Transmission	3
AUTO 2133	Automotive Electrical III	3
AUTO 2140	Advanced Chassis Systems	3
AUTO 2162	Engine Controls and Emissions II	3
AUTO 2220	Advanced Automotive Drivetrains	3
AUTO 2280	Automotive Service	6
Program Electives		
Select one or more credits from the following courses:		1
AUTO 1840	Independent Study	
AUTO 2345	Automotive Hybrid Technology	
AUTO 2364	Automotive ScanTool Usage & Exploration	
AUTO 2365	Intro to Diesel Fuel Systems & Emissions	
AUTO 2370	A.S.E. Certification Analysis & Tech	
AUTO 2455	Electric Vehicles (EV) and Equipment	
AUTO 2840	Experimental/Pilot Class	
AUTO 2860	Internship (Career & Technical Ed)	
WELD 1100	Welding I	

General Education

Select 18-22 credits	18-22
Total Credits	64-68

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Aviation Technology

Area of Study

For more information about Aviation Technology, please visit the program page (<https://www.cod.edu/academics/programs/aviation/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Aviation Management, A.A.S. (p. 69)

Aviation Management, A.A.S.

The Associate of Applied Science in Aviation Management degree will provide students various aviation industry education and employment opportunities. Students will be exposed to two aviation tracks: one to complete their FAA pilot certifications while completing their degree, and one that focuses on management if the student has already obtained their certifications or does not wish to do so.

For more information about Aviation Technology, please visit the program page (<https://www.cod.edu/academics/programs/aviation/>).

Degree Requirements

Field of Study Code: AVIAT.AAS.MANAG

Code	Title	Credits
Program Required Courses		
AVIAT 1100	Introduction to Aviation	1
AVIAT 1105	Aviation Procedures Training	3
BUSIN 1100	Introduction to Business	3
EARTH 1110	Introduction to Meteorology	4
EARTH 1116	Weather Analysis and Forecasting I	1
AVIAT 1130	Air Traffic Control	3
AVIAT 1140	Aviation Safety Principles	3
AVIAT 2114	Aviation Meteorology	2
AVIAT 2310	Airline Management	3
AVIAT 2500	Aviation Career Preparation	3
General Education		
Communications		6
Humanities		3
Math		3
Social & Behavioral Sciences		3
Emphasis Courses – Choose one Emphasis		23-24
Flight training		
AVIAT 1110	Private Pilot Ground School	

AVIAT 1210	Private Pilot Flight Instruction
AVIAT 2210	Commercial Pilot Flight Instruction I
AVIAT 1120	Instrument Ground School
AVIAT 1220	Instrument Flight Instruction
AVIAT 2110	Commercial Pilot Ground School
AVIAT 2220	Commercial Pilot Flight Instruction II
AVIAT 2250	Flight Instructor, Airplane
or AVIAT 2230	Multi-Engine Flight Instruction
AVIAT 2400	Advanced Aircraft Systems
Management	
MANAG 1100	Supervision
AVIAT 1310	sUAS Part 107 Ground School
or AVIAT 1110	Private Pilot Ground School
PHYSI 1100	Physics
MANAG 2210	Principles of Management
AVIAT 2300	Airport Management
AVIAT 2320	Introduction to Aircraft Dispatch
AVIAT 2865	Aviation Internship

Total Credits

64-65

Central Sterile Processing Distribution

Area of Study

For more information about Central Sterile Processing Distribution, please visit the program page (<http://www.cod.edu/cspdt/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Central Sterile Processing Distribution Technician, Certificate (p. 69)

Central Sterile Processing Distribution Technician, Certificate

The Central Sterile Processing and Distribution Program prepares entry-level professionals in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The curriculum incorporates Healthcare Sterile Processing Association (HSPA) professional standards, guidelines, and competencies necessary for employment in a sterile processing department.

For more information about Central Sterile Processing Distribution, please visit the program page (<http://www.cod.edu/cspdt/>).

Certificate Requirements

Field of Study Code: CSPD.CER

Code	Title	Credits
Program Requirements		
CSPD 1111	Central Sterile Processing and Distribution	3
SURGT 1000	Ethical Considerations in the Health Care Industry	3
CSPD 1211	Central Sterile Processing and Distribution Practicum	3
HLTHS 1110	Biomedical Terminology	3
Total Credits		12

Computer and Information Science

Area of Study

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Application and Technical Support Specialist, A.A.S. (p. 70)
- Business Intelligence Analysis, Certificate (<https://catalog.cod.edu/programs-study/computer-information-science/business-intelligence-analysis-certificate/>)
- Business Productivity Software, Certificate (p. 70)
- C++ Language Proficiency, Certificate (p. 71)
- Data Analytics, Certificate (p. 71)
- Database, Certificate (<https://catalog.cod.edu/programs-study/computer-information-science/database-certificate/>)
- Game Design and Development, Certificate (p. 71)
- Game Development, A.A.S. (<https://catalog.cod.edu/programs-study/computer-information-science/game-development-aas/>)
- Game Programming and Development, Certificate (p. 71)
- Internet of Things (IoT) Proficiency, Certificate (p. 72)
- iOS Developer Proficiency, Certificate (p. 72)
- JAVA Language Proficiency, Certificate (p. 72)
- LINUX, Certificate (p. 72)
- Machine Learning, Certificate (<https://catalog.cod.edu/programs-study/computer-information-science/machine-learning-certificate/>)
- Python Language Proficiency, Certificate (p. 72)
- Software Development, A.A.S. (p. 73)
- UNIX Proficiency, Certificate (p. 74)
- Visual BASIC Language Proficiency, Certificate (p. 74)
- Web Client Developer, Certificate (p. 75)
- Web Development, A.A.S. (p. 75)
- Web Programmer, Certificate (p. 75)
- Windows Network Administration, Certificate (p. 75)

Application and Technical Support Specialist, A.A.S.

The **Application and Technical Support Specialist** degree prepares students to provide help, support, and technical advice to computer users.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Degree Requirements

Field of Study Code: CIS.AAS.TECH

Code	Title	Credits
Program Requirements		
CIS 1150	Understand Computers/Information/Systems	3
CIS 1160	Windows Command Shell	3
CIS 1180 or CIT 1116	Data Communication & Networking Network Essentials	3
CIS 1205	Office Ste SOFTWARE and Integration	3
CIS 1310	HTML and CSS	3
CIS 1400	Programming Logic and Technique	4
CIS 1450	Intro to Linux/Unix Operating Systems	3
CIS 1610	Windows Client OS	3
CIS 2770	Introduction to System Analysis & Design	3
BUSIN 1111	Customer Service	3
CIT 1100	IT Fundamentals	3
ENGLI 1105	Workplace Writing	3
Program Electives		
Select 13 credits from any CIS courses ^{1, 2}		13
General Education		
Select 15 credits ¹		15
Total Credits		65

¹ In addition to the courses listed above.

² Except CIS 1110 Introduction to Informatics.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Business Productivity Software, Certificate

The **Business Productivity Software** certificate requires 19 credits in the courses listed below.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.BUSPRO

Code	Title	Credits
CIS 1130	Windows Basics	2
CIS 1150	Understand Computers/Information/ Systems	3
CIS 1205	Office Ste SOFTWARE and Integration	3
CIS 1221	Data Analysis with Spreadsheets	3
CIS 1230	Database Application	3
CIS 1240	Presentation Graphics - Windows Based	2
CIS 1300	Web Design Software	3
Total Credits		19

C++ Language Proficiency, Certificate

The **C++ Language Proficiency certificate** requires 15 credits in the courses listed below.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.CPLUS

Code	Title	Credits
CIS 1150	Understand Computers/Information/ Systems	3
CIS 1400	Programming Logic and Technique	4
CIS 2541	C++ Language Programming	4
CIS 2542	Adv C++ With Data Structure Application	4
Total Credits		15

Data Analytics, Certificate

This certificate prepares students for entry-level data analysis, setup, and usage of Business Intelligence (BI), and data analysis solutions. Provides a foundation for future training in data science and big data analysis. Prepares students for the Artificial Intelligence (AI) era.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.DATA

Code	Title	Credits
CIS 1170	World of Data Science	1
CIS 1221	Data Analysis with Spreadsheets	3
CIS 1222	Business Intelligence Analysis and Visualization	3
CIS 1230	Database Application	3
CIS 1655	AI Technical Essentials	3
CIS 2735	Data Analytics and Visualization	4
MATH 1533 or MATH 1635	Finite Mathematics Statistics	4
Total Credits		21

Game Design and Development, Certificate

The **Game Design and Development certificate** will prepare the student for careers in video game design and development.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.GAMED

Code	Title	Credits
CIS 1199	Introduction to Game Industry	3
CIS 1200	Game Design	3
CIS 1201	Advanced Game Design	3
CIS 1211	2D Game Development	3
CIS 1212	Game Asset Creation	3
CIS 1400	Programming Logic and Technique	4
CIS 2211	2D Game Scripting	3
CIS 2212	3D Game Development	3
CIS 2541	C++ Language Programming	4
ART 1101	Drawing I	3
Total Credits		29

Game Programming and Development, Certificate

The **Game Programming and Development certificate** prepares the student to program and develop video games using programming languages and development tools used in the game industry.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.GAMEP

Code	Title	Credits
CIS 1199	Introduction to Game Industry	3
CIS 1200	Game Design	3
CIS 1211	2D Game Development	3
CIS 1400	Programming Logic and Technique	4
CIS 2211	2D Game Scripting	3
CIS 2212	3D Game Development	3
CIS 2220	Game Programming Using C++	3
CIS 2420	Microprocessor Assembly Language	4
CIS 2541	C++ Language Programming	4
CIS 2542	Adv C++ With Data Structure Application	4
Total Credits		31

Internet of Things (IoT) Proficiency, Certificate

The **Internet of Things (IoT) Proficiency Certificate** is designed for students who have already earned an associates or baccalaureate degree in a technical field and/or are employed in the technical industry. This certificate prepares students to design and develop applications using Internet connected single-board computers and sensor devices.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.IOT

Code	Title	Credits
CIS 1160	Windows Command Shell	3
CIS 1180 or CIT 1116	Data Communication & Networking Network Essentials	3
CIS 1310	HTML and CSS	3
CIS 1400	Programming Logic and Technique	4
CIS 1410	Introduction to Human Computer Interaction	3
CIS 1450	Intro to Linux/Unix Operating Systems	3
CIS 2320	JavaScript Programming	4
CIS 2470	Web Connected Devices	3
CIS 2471	Building Internet of Things (IoT) Devices	3
CIS 2531	Introduction to Python Programming	4
CIT 1640	Network Security Fundamentals	3
Total Credits		36

iOS Developer Proficiency, Certificate

The iOS Developer Proficiency certificate prepares the student to design and develop applications for Apple iOS platform in accordance with Apple development standards.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.IOSDEV

Code	Title	Credits
CIS 1400	Programming Logic and Technique	4
CIS 2590	Swift Programming Language	4
CIS 2592	iOS Application Development	4
CIS 2594	Advanced iOS Application Development	4
Total Credits		16

JAVA Language Proficiency, Certificate

The **JAVA Language Proficiency certificate** requires 15 credits in the courses listed below.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.JAVA

Code	Title	Credits
CIS 1150	Understand Computers/Information/Systems	3
CIS 1400	Programming Logic and Technique	4
CIS 2571	Introduction to Java	4
CIS 2572	Collections in Java	4
Total Credits		15

LINUX, Certificate

The **LINUX certificate** documents proficiency in the Linux operating system and its environment. This certificate requires 16 credits in the courses listed below.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.LINUX

Code	Title	Credits
CIS 1150	Understand Computers/Information/Systems	3
CIS 1400	Programming Logic and Technique	4
CIS 1450	Intro to Linux/Unix Operating Systems	3
CIS 2440	Shell Programming for Unix/Linux	3
CIS 2455	LINUX System Administration	3
Total Credits		16

Python Language Proficiency, Certificate

The **Python Language Proficiency Certificate** provides students with core competencies in the use of the Python Programming Language. Students are required to complete coursework that includes basic and advanced concepts in Python language programming, computer information systems, data structure application, Python standard library applications, Data science, and programming logic and design.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.PYTHON

Code	Title	Credits
CIS 1400	Programming Logic and Technique	4
CIS 2531	Introduction to Python Programming	4
CIS 2532	Advanced Python Programming	4
Total Credits		12

Software Development, A.A.S.

The Software Development degree prepares students to design, develop, and maintain software through the implementation of established software design constructs in standard programming languages.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Degree Requirements

Field of Study Code: CIS.AAS.SOFTW

Code	Title	Credits
Program Requirements		
CIS 1150	Understand Computers/Information/ Systems	3
CIS 1180	Data Communication & Networking	3
CIS 1230	Database Application	3
CIS 1400	Programming Logic and Technique	4
CIS 1410	Introduction to Human Computer Interaction	3
CIS/CIT 1450	Intro to Linux/Unix Operating Systems	3
CIS 1640	Cybernetic Safety and Security	3
CIS 2770	Introduction to System Analysis & Design	3
PHILO 1114	Business Ethics	3
ENGLI 1101	English Composition I	3
CIS 2790	Software Development Capstone Project	4
CIS/CIT 1140	Cloud Essentials	3

Emphasis Courses

Complete at least 1 Emphasis and any additional CIS level 2000 course for a total of 15 credit hours:

AI Emphasis (p. 73)	
AR/VR Emphasis (p. 73)	
VB .NET Emphasis (p.)	
C# .NET Emphasis (p. 73)	
C++ Emphasis (p.)	
Python Emphasis (p.)	
iOS Emphasis (p.)	
Android Emphasis (p.)	
Java Emphasis (p.)	
Database Emphasis (p.)	
Web Emphasis (p.)	

General Education

Math - Level 1000 or above	3
Physical/Life Science - Level 1000 or above	3
Social and Behavioral Science	3

Select one of the following: 3

SPEEC 1100	Fundamentals of Speech Communication
SPEEC 1120	Small-Group Communication
SPEEC 1150	Introduction to Business Communication

Total Credits 65

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Emphases

AI Emphasis

This emphasis focuses design and development of Artificial Intelligence (AI).

Code	Title	Credits
CIS 1655	AI Technical Essentials	3
CIS 2531	Introduction to Python Programming	4
CIS 2532	Advanced Python Programming	4
CIS 2640	Introduction to Machine Learning (ML)	4
or CIS 2641	Introduction to Natural Language Processing (NLP)	
Total Credits		15

AR/VR Emphasis

This emphasis focuses on the creation, maintenance, and support of software application in the AR/VR environment

Code	Title	Credits
CIS 2212	3D Game Development	4
CIS 2214	Augmented Reality and Virtual Reality Development	4
CIS 2541	C++ Language Programming	4
Total Credits		12

VB .NET Emphasis

This emphasis focuses on the creation, maintenance, and support of software applications in the VB .NET environment.

Code	Title	Credits
CIS 1310	HTML and CSS	3
CIS 1510	Graphical User Interface Programming	4
CIS 2350	Introduction to ASP.NET	4
CIS 2510	Adv Graphical User Interface Programming	4
Total Credits		15

C#.NET Emphasis

This emphasis focuses on the creation, maintenance, and support of software applications in the C# .NET environment.

Code	Title	Credits
CIS 1310	HTML and CSS	3
CIS 2350	Introduction to ASP.NET	4
CIS 2561	Introduction to C# .NET	4

CIS 2562	Advanced C# Programming	4
Total Credits		15

C++ Emphasis

This emphasis focuses on the creation, maintenance, and support of software applications in the C++ environment.

Code	Title	Credits
CIS 2541	C++ Language Programming	4
CIS 2542	Adv C++ With Data Structure Application	4
Total Credits		8

Python Emphasis

This emphasis focuses on the creation, maintenance, and support of software applications in the Python environment.

Code	Title	Credits
CIS 2531	Introduction to Python Programming	4
CIS 2532	Advanced Python Programming	4
Total Credits		8

iOS Emphasis

This emphasis focuses on the creation, maintenance, and support of software application in the iOS environment.

Code	Title	Credits
CIS 2590	Swift Programming Language	4
CIS 2592	iOS Application Development	4
CIS 2594	Advanced iOS Application Development	4
Total Credits		12

Android Emphasis

This emphasis focuses on the creation, maintenance, and support of software application in the Android environment.

Code	Title	Credits
CIS 2571	Introduction to Java	4
CIS 2593	Android Application Development	4
CIS 2595	Advanced Android Application Development	4
Total Credits		12

Java Emphasis

This emphasis focuses on the creation, maintenance, and support of software application in the Java environment.

Code	Title	Credits
CIS 2571	Introduction to Java	4
CIS 2572	Collections in Java	4
Total Credits		8

Database Emphasis

This emphasis focuses on the creation, maintenance, and support of databases.

Code	Title	Credits
CIS 2710	Database Management	4
CIS 2720	Structured Query Language (SQL)	3
CIS 2730	Enterprise Database Development	3
Total Credits		10

Web Emphasis

This emphasis focuses on the creation, maintenance, and support of software application in the Web environment.

Code	Title	Credits
CIS 1310	HTML and CSS	3
CIS 2320	JavaScript Programming	4
CIS 2330	Introduction to XML	3
CIS 2360	Intro to PHP Programming Language	4
Total Credits		14

UNIX Proficiency, Certificate

The **UNIX Proficiency certificate** requires 16 credits in the courses listed below.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.UNIX

Code	Title	Credits
CIS 1150	Understand Computers/Information/ Systems	3
CIS 1400	Programming Logic and Technique	4
CIS 1450	Intro to Linux/Unix Operating Systems	3
CIS 2440	Shell Programming for Unix/Linux	3
CIS 2450	Please consult with your program/faculty adviser.	3
Total Credits		16

Visual BASIC Language Proficiency, Certificate

The **Visual BASIC Language Proficiency certificate** requires 15 credits in the courses listed below.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.VB

Code	Title	Credits
CIS 1150	Understand Computers/Information/ Systems	3
CIS 1400	Programming Logic and Technique	4
CIS 1510	Graphical User Interface Programming	4

CIS 2510	Adv Graphical User Interface Programming	4
Total Credits		15

Web Client Developer, Certificate

The **Web Client Developer certificate** provides the necessary skills and knowledge for client-side web site development. Web development using HTML (Hypertext Markup Language Living Standard), CSS (Cascading Style Sheets), and JavaScript. This certificate prepares students to design and develop web sites using industry standard web development technologies.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.CLIENT

Code	Title	Credits
CIS 1310	HTML and CSS	3
CIS 1311	Advanced HTML and CSS	3
CIS 1400	Programming Logic and Technique	4
CIS 2320	JavaScript Programming	4
Total Credits		14

Web Development, A.A.S.

Web Development degree is designed for students who wish to enter into the web development market or already working as a web developer in the industry. This degree prepares students to design and develop web sites using industry standard web development technologies.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Degree Requirements

Field of Study Code: CIS.AAS.WEBDEV

Code	Title	Credits
Program Requirements		
CIS 1150	Understand Computers/Information/Systems	3
CIS 1180	Data Communication & Networking	3
CIS 1310	HTML and CSS	3
CIS 1311	Advanced HTML and CSS	3
CIS 1400	Programming Logic and Technique	4
CIS 1410	Introduction to Human Computer Interaction	3
CIS 2320	JavaScript Programming	4
CIS 2321	Advanced JavaScript Programming	4
CIS 2330	Introduction to XML	3
CIS 2531	Introduction to Python Programming	4
CIS 2571	Introduction to Java	4
CIS 2710	Database Management	4
CIS 2720	Structured Query Language (SQL)	3
CIS 2770	Introduction to System Analysis & Design	3
General Education		

Communications	6
Physical/Life Science	3-5
Mathematics	3-5
Humanities	3
Social & Behavioral Science	3
Total Credits	66-70

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Web Programmer, Certificate

The **Web Programmer certificate** is designed for students who wish to enter into the web development market or already working as a web developer in the industry. This certificate prepares students to design and develop web sites using industry standard web development technologies.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.WEBPRG

Code	Title	Credits
CIS 1150	Understand Computers/Information/Systems	3
CIS 1180	Data Communication & Networking	3
CIS 1310	HTML and CSS	3
CIS 1311	Advanced HTML and CSS	3
CIS 1400	Programming Logic and Technique	4
CIS 2320	JavaScript Programming	4
CIS 2330	Introduction to XML	3
CIS 2531	Introduction to Python Programming	4
CIS 2571	Introduction to Java	4
Total Credits		31

Windows Network Administration, Certificate

The **Windows Network Administration certificate** for Information Technology (IT) professionals with the knowledge to design and implement a Microsoft network using Active Directory (AD). This certificate requires 21 credits in the courses listed below.

For more information about Computer and Information Science, please visit the program page (<http://www.cod.edu/cis/>).

Certificate Requirements

Field of Study Code: CIS.CER.NETWK

Code	Title	Credits
CIS 1150	Understand Computers/Information/Systems	3
CIS 1180	Data Communication & Networking	3

CIS 1610	Windows Client OS	3
CIS 1620	Windows Server OS	3
CIS 1630	Windows Server Active Directory (AD)	3
CIS 1660	Managing Microsoft Windows Server Netwk	3
CIS 1670	Planning a Microsoft Win Server Network	3
Total Credits		21

Computer and Information Technology

Area of Study

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- CIT CCNA, Certificate (p. 76)
- CIT Network Associate Security, Certificate (<https://catalog.cod.edu/programs-study/computer-information-technology/cit-network-associate-security-certificate/>)
- CIT Networking Professional, Certificate (p. 76)
- CompTIA A+ and Network+ PC Technician, Certificate (p. 76)
- Computer and Information Technology, A.A.S. (p. 76)
- Computer and Internetworking Technologies, Certificate (p. 77)
- Cybersecurity and Defense, A.A.S. (p. 77)
- Cybersecurity Specialist, Certificate (p. 78)
- Enterprise System Administrator, Certificate (p. 78)
- System Support Specialist, Certificate (p. 78)
- Voice Over IP Telephony, Certificate (p. 78)

CIT CCNA, Certificate

Upon successful completion of this certificate, students will have gained hands-on experience installing, operating, configuring, troubleshooting and securing routing and switching networks. Additionally, these courses prepare student for the IT industry certification Cisco Certified Network Associate (CCNA).

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Certificate Requirements

Field of Study Code: CIT.CER.CITCCNA

Code	Title	Credits
CIT 1121	Introduction to Networks	3
CIT 1122	Routing and Switching Essentials	3
CIT 1123	Scaling Networks, Security, & Automation	3
Total Credits		9

CIT Networking Professional, Certificate

CIT Networking Professional certificate provide students with advanced knowledge and hands-on experience operating, configuring, troubleshooting and securing networks. Additionally, these courses prepare student for the industry certification Cisco Certified Network Professional (CCNP).

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Certificate Requirements

Field of Study Code: CIT.CER.NETPRO

Code	Title	Credits
CIT 1121	Introduction to Networks	3
CIT 1122	Routing and Switching Essentials	3
CIT 1123	Scaling Networks, Security, & Automation	3
CIT 2241	Enterprise Network Core Technologies	3
CIT 2242	Enterprise Advanced Routing and Services	3
Total Credits		15

CompTIA A+ and Network+ PC Technician, Certificate

The CompTIA A+ and Network+ PC Technician certificate prepare students for CompTIA A+ and Network+ technician exams. This certificate is designed to provide student a broad exposure to computer systems as well as system networking. This certificate requires 12 credits in the courses listed below.

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Certificate Requirements

Field of Study Code: CIT.CER.TECH

Code	Title	Credits
CIT 1100	IT Fundamentals	3
CIT 1111	Computer and Hardware Maintenance	3
CIT 1112	Operating System Maintenance	3
CIT 1116	Network Essentials	3
Total Credits		12

Computer and Information Technology, A.A.S.

The Computer and Information Technology degree is designed to provide students with a comprehensive understanding of key technical areas including Computers, Networking, Servers, VoIP, Wireless, Cloud, and Security. This program prepares students for transfer, employment, and

preparation for industry certification exams (CompTIA A+, CompTIA Security+, Cisco CCNA, Microsoft MCSA).

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Degree Requirements

Field of Study Code: CIT.AAS.CIT

Code	Title	Credits
Program Requirements		
CIT 1100 or CIT 1120	IT Fundamentals Network Addressing Fundamentals	2-3
CIT 1111	Computer and Hardware Maintenance	3
CIT 1112	Operating System Maintenance	3
CIT 1121	Introduction to Networks	3
CIT 1122	Routing and Switching Essentials	3
CIT 1123	Scaling Networks, Security, & Automation	3
CIT/CIS 1450	Intro to Linux/Unix Operating Systems	3
CIT 1640 or CIT 2251	Network Security Fundamentals Enterprise Network Security	3
CIT 2150	Wireless Network Administration	3
CIT 2410	Enterprise Internet Telephony	3
CIT 1710	Introduction to Servers	3
CIT 2710	Computer Information Technology Capstone	3
Program Electives		
Select 10 or 11 credits from any 1000 or 2000 level CIT course ¹		11
General Education		
Select 18 credits		18
Total Credits		64-65

¹ Students taking CIT 1120 Network Addressing Fundamentals require 11, students taking CIT 1100 IT Fundamentals require 10.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Computer and Internetworking Technologies, Certificate

The **Computer and Internetworking Technologies** certificate requires 36 credits in courses listed below.

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Certificate Requirements

Field of Study Code: CIT.CER

Code	Title	Credits
CIT 1100	IT Fundamentals	3
CIT 1111	Computer and Hardware Maintenance	3
CIT 1112	Operating System Maintenance	3

CIT 1116	Network Essentials	3
CIT 1121	Introduction to Networks	3
CIT 1122	Routing and Switching Essentials	3
CIT 1123	Scaling Networks, Security, & Automation	3
CIT 1124	Connecting Networks	3
CIT 1640	Network Security Fundamentals	3
CIT 1645	Internet Telephony	3
CIT 2251	Enterprise Network Security	3
CIT 2651	Computer Forensics I	3
Total Credits		36

Cybersecurity and Defense, A.A.S.

This degree provides a foundation in the principles of cybersecurity. The course content covers functions of networks, hardware, and operating systems. This degree program prepares students for entry level employment in Information Technology.

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Degree Requirements

Field of Study Code: CIT.AAS.CYBER

Code	Title	Credits
Program Requirements		
CIT 1121	Introduction to Networks	3
CIT 1122	Routing and Switching Essentials	3
CIT 1123	Scaling Networks, Security, & Automation	3
CIT 1450 or CIS 1450	Intro to Linux/Unix Operating Systems Intro to Linux/Unix Operating Systems	3
CIT 1640	Network Security Fundamentals	3
CIT 1710	Introduction to Servers	3
CIT 2173	Virtualization: Install/Configure/Manage	3
CIT 2251	Enterprise Network Security	3
CIT 2510	Cloud Server Computing Services and Administration	3
CIT 2631	Cyber Defense	3
CIT 2640	Ethical Hacking	3
CIT 2651	Computer Forensics I	3
Program Electives		
Select 6 credits from any 2000 Level CIT courses ¹		6
General Education		
Select 18 credits ¹		18
Total Credits		60

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Cybersecurity Specialist, Certificate

This cybersecurity certificate provides a foundation in basic principles of cybersecurity. It covers function of networks, operating systems, and security principles. The Cybersecurity Certificate prepares students for employment in entry level position in information systems.

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Certificate Requirements

Field of Study Code: CIT.CER.CYBER

Code	Title	Credits
CIT 1121	Introduction to Networks	3
CIT 1122	Routing and Switching Essentials	3
CIT/CIS 1450	Intro to Linux/Unix Operating Systems	3
CIT 1640	Network Security Fundamentals	3
CIT 1710	Introduction to Servers	3
CIT 2251	Enterprise Network Security	3
CIT/CIS 2455	LINUX System Administration	3
CIT 2640	Ethical Hacking	3
Total Credits		24

Enterprise System Administrator, Certificate

This certificate prepares students for Enterprise System Administrator positions.

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Certificate Requirements

Field of Study Code: CIT.CER.SYSADM

Code	Title	Credits
CIT 1121	Introduction to Networks	3
CIT 1122	Routing and Switching Essentials	3
CIT/CIS 1450	Intro to Linux/Unix Operating Systems	3
CIT 1612	Windows PC Desktop Operating Systems	3
CIT 1710	Introduction to Servers	3
CIT 2510	Cloud Server Computing Services and Administration	3
CIT 2511	Cloud Platform and Web Services	3
CIT/CIS 2455	LINUX System Administration	3
Total Credits		24

System Support Specialist, Certificate

The **System Support Specialist** certificate prepares students to work as Computer and Network Support Specialists. Upon completion, students are prepared for the following industrial certifications: CompTIA A+,

CompTIA Net+, and CompTIA Security+. This certificate requires 17 credits in the courses listed below.

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Certificate Requirements

Field of Study Code: CIT.CER.SYS

Code	Title	Credits
CIT 1100	IT Fundamentals	3
CIT 1111	Computer and Hardware Maintenance	3
CIT 1112	Operating System Maintenance	3
CIT 1116	Network Essentials	3
CIT 1121	Introduction to Networks	3
CIT 1640	Network Security Fundamentals	3
Total Credits		18

Voice Over IP Telephony, Certificate

The **Voice Over IP Telephony** certificate provides the foundations in design, installation, and troubleshooting, and use of Voice over IP related software and hardware. This certificate requires 15 credits in the courses listed below.

For more information about Computer and Information Technology, please visit the program page (<http://www.cod.edu/cit/>).

Certificate Requirements

Field of Study Code: CIT.CER.VOICE

Code	Title	Credits
CIT 1121	Introduction to Networks	3
CIT 1122	Routing and Switching Essentials	3
CIT 1123	Scaling Networks, Security, & Automation	3
CIT 1124	Connecting Networks	3
CIT 2410	Enterprise Internet Telephony	3
Total Credits		15

Cosmetology

Area of Study

For more information about Cosmetology, please visit the program page (<http://www.cod.edu/cosmetology/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Cosmetology, A.A.S. (p. 79)
- Cosmetology, Certificate (p. 79)
- Nail Technology, Certificate (p. 79)

Cosmetology, A.A.S.

Students will learn professional level techniques in hair design, chemical processes, esthetics, and nail technology. Prepares student for state certification for the Illinois Cosmetology License from the Department of Professional and Financial Regulations. The **Cosmetology degree** requires a minimum of 68 credits in program requirements and general education in the courses listed below.

For more information about Cosmetology, please visit the program page (<http://www.cod.edu/cosmetology/>).

Degree Requirements

Field of Study Code: COSME.AAS

Code	Title	Credits
Program Requirements		
COSME 1101	Introduction to Cosmetology	3
COSME 1103	Chemical Services I	3
COSME 1105	Hair Styling I	3
COSME 1107	Thermal Styling I	3
COSME 1111	Hair Styling II	3
COSME 1113	Chemical Services II	3
COSME 1115	Salon Operations I	2
COSME 1117	Esthetics and Nail Technology I	3
COSME 2201	Hair Styling III	3
COSME 2203	Chemical Services III	3
COSME 2205	Esthetics and Nail Technology II	3
COSME 2207	Salon Safety and Sanitation	2
COSME 2221	Hair Styling IV	3
COSME 2223	Chemical Services IV	3
COSME 2225	Salon Operations II	3
COSME 2227	Thermal Styling II	2
COSME 2250	License Review	3
General Education		
Select 18 to 22 credits ¹		18-22
Program Electives		
Select two credits from the Cosmetology courses listed below:		2
COSME 1820	Selected Topics	
COSME 2253	Advanced Chemical Services II	
COSME 2260	Wig Production I	
COSME 2862	Internship (Career & Technical Ed)	
COSME 2872	Cosmetology Practicum	
Total Credits		68-72

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Cosmetology, Certificate

Students will learn professional level techniques in hair design, chemical processes, esthetics, and nail technology. Prepares students for state

certification for the Illinois Cosmetology License from the Department of Professional and Financial Regulations. After completing all program requirements, students are eligible to take the licensure examination through the Illinois Department of Professional Regulation. Students must be licensed in order to practice cosmetology in Illinois. The Cosmetology certificate requires 50 credits in the courses listed below.

For more information about Cosmetology, please visit the program page (<http://www.cod.edu/cosmetology/>).

Certificate Requirements

Field of Study Code: COSME.CER

Code	Title	Credits
Program Requirements		
COSME 1101	Introduction to Cosmetology	3
COSME 1103	Chemical Services I	3
COSME 1105	Hair Styling I	3
COSME 1107	Thermal Styling I	3
COSME 1111	Hair Styling II	3
COSME 1113	Chemical Services II	3
COSME 1115	Salon Operations I	2
COSME 1117	Esthetics and Nail Technology I	3
COSME 2201	Hair Styling III	3
COSME 2203	Chemical Services III	3
COSME 2205	Esthetics and Nail Technology II	3
COSME 2207	Salon Safety and Sanitation	2
COSME 2221	Hair Styling IV	3
COSME 2223	Chemical Services IV	3
COSME 2225	Salon Operations II	3
COSME 2227	Thermal Styling II	2
COSME 2250	License Review	3
Program Electives		2
Select two credits from the Cosmetology courses listed below:		
COSME 1820	Selected Topics	
COSME 2253	Advanced Chemical Services II	
COSME 2260	Wig Production I	
COSME 2862	Internship (Career & Technical Ed)	
COSME 2872	Cosmetology Practicum	

Total Credits **50**

Nail Technology, Certificate

The art and science of beautifying and improving nails and skin of hands and feet. Includes the management of salon operations and licensure requirements. The **Nail Technology certificate** requires 12 credits in the courses listed below.

For more information about Cosmetology, please visit the program page (<http://www.cod.edu/cosmetology/>).

Certificate Requirements

Field of Study Code: COSME.CER.NAIL

Code	Title	Credits
COSME 1160	Nail Technology Theory I	3
COSME 1162	Nail Technology Lab I	3
COSME 1168	Nail Technology Theory II	3
COSME 1170	Nail Technology Lab II	3
Total Credits		12

Culinary Arts

Area of Study

For more information about Culinary Arts, please visit the program page (<http://www.cod.edu/culinary/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Baking and Pastry Arts, A.A.S. (p. 80)
- Baking and Pastry Arts, Certificate (p. 80)
- Culinary Arts, A.A.S. (p. 80)
- Culinary Arts, Certificate (p. 81)
- Culinology and Food Science, A.A.S. (p. 81)

Baking and Pastry Arts, A.A.S.

The **Baking and Pastry Arts degree** provides an education and hands-on training in the fundamental skills necessary for a career and mobility in the baking and pastry industry. This degree requires a minimum of 62 credits in program requirements, program electives, and general education, as listed below.

For more information about Culinary Arts, please visit the program page (<http://www.cod.edu/culinary/>).

Degree Requirements

Field of Study Code: CULIN.AAS.BAKE

Code	Title	Credits
Program Requirements		
HOSP 1100	Introduction to the Hospitality Industry	3
CULIN 1120	Sanitation	1
CULIN 1108	Culinary Measurements & Conversions	2
CULIN 1170	Baking Science and Techniques	2
CULIN 1171	Baking Fundamentals	3
CULIN 1101	Introduction to Culinary Arts	3
CULIN 1109	Culinary and Baking Nutrition	1
CULIN 1172	Pastry Fundamentals	3
CULIN 1175	Specialty Baking	3
CULIN 1103	Fast Casual Dining Operations	2
CULIN 1174	Cake Formula and Decorating Foundations	3
HOSP 1121	Supervision in the Hospitality Industry	3
CULIN 2152	Food, Beverage, and Equipment Purchasing	2
CULIN 2176	Intermediate Baking and Pastry	4
CULIN 1173	Foodtrepreneurship	2

CULIN 2177	Advanced Baking & Pastry Restaurant Production	4

Program Electives

Select five credits from the following courses to satisfy this elective credit: ¹

CULIN 1190	Food & Wine Passport	
CULIN 2178	Artistic Chocolate and Sugar	
CULIN 2179	Artisan Bread and Viennoiserie	
CULIN 2180	Cake Decorating Techniques	
CULIN 2863	Internship (Career & Technical Ed)	

General Education

Select 18 to 22 credits ¹

Total Credits **64-68**

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Baking and Pastry Arts, Certificate

The **Baking and Pastry Arts certificate** provides a basic introduction and exposure to the fundamental skills necessary to pursue entry level positions in the baking and pastry industry. This certificate requires 28 credits in the courses listed below.

For more information about Culinary Arts, please visit the program page (<http://www.cod.edu/culinary/>).

Certificate Requirements

Field of Study Code: CULIN.CER.BAKE

Code	Title	Credits
Program Requirements		
CULIN 1101	Introduction to Culinary Arts	3
CULIN 1103	Fast Casual Dining Operations	2
CULIN 1108	Culinary Measurements & Conversions	2
CULIN 1109	Culinary and Baking Nutrition	1
CULIN 1120	Sanitation	1
CULIN 1170	Baking Science and Techniques	2
CULIN 1171	Baking Fundamentals	3
CULIN 1172	Pastry Fundamentals	3
CULIN 1173	Foodtrepreneurship	2
CULIN 1174	Cake Formula and Decorating Foundations	2
CULIN 1175	Specialty Baking	3
CULIN 2176	Intermediate Baking and Pastry	4
Total Credits		28

Culinary Arts, A.A.S.

The Culinary Arts program provides an opportunity for students to learn the necessary skills to begin or enhance a career in the hospitality industry, the nation's largest retail employer. The **Culinary Arts degree**

consists of a minimum of 64 credits in program requirements program electives and general education.

For more information about Culinary Arts, please visit the program page (<http://www.cod.edu/culinary/>).

Degree Requirements

Field of Study Code: CULIN.AAS.CUART

Code	Title	Credits
Program Requirements		
CULIN 1101	Introduction to Culinary Arts	3
CULIN 1102	Regional American Cuisine	4
CULIN 1103	Fast Casual Dining Operations	2
CULIN 1108	Culinary Measurements & Conversions	2
CULIN 1109	Culinary and Baking Nutrition	1
CULIN 1120	Sanitation	1
CULIN 1171	Baking Fundamentals	3
CULIN 1172	Pastry Fundamentals	3
CULIN 2152	Food, Beverage, and Equipment Purchasing	2
CULIN 2153	Garde Manger	3
CULIN 2205	International Cuisine	3
CULIN 2210	Contemporary a' la carte Cuisine	4
CULIN 2863	Internship (Career & Technical Ed)	3
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1121	Supervision in the Hospitality Industry	3
HOSP 1151	Restaurant Service and Sales	2
HOSP 1152	Advanced Restaurant Service	2
Program Electives		
Select three credits from the following: ¹		3
CULIN 1105	Culinary Applications for Specialty Diet	
CULIN 1185	Elements of Taste and Flavor	
CULIN 1190	Food & Wine Passport	
CULIN 2154	Advanced Garde Manger	
CULIN 2206	Asian Cuisine	
General Education		
Select 18 to 22 credits ¹		18-22
Total Credits		65-69

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Culinary Arts, Certificate

The Culinary Arts program provides an opportunity for students to learn the necessary skills to begin or enhance a career in the hospitality industry, the nation's largest retail employer. The **Culinary Arts certificate** requires 28 credits in the courses listed below.

For more information about Culinary Arts, please visit the program page (<http://www.cod.edu/culinary/>).

Certificate Requirements

Field of Study Code: CULIN.CER.CUART

Code	Title	Credits
CULIN 1101	Introduction to Culinary Arts	3
CULIN 1102	Regional American Cuisine	4
CULIN 1103	Fast Casual Dining Operations	2
CULIN 1108	Culinary Measurements & Conversions	2
CULIN 1109	Culinary and Baking Nutrition	1
CULIN 1120	Sanitation	1
CULIN 1171	Baking Fundamentals	3
CULIN 1172	Pastry Fundamentals	3
CULIN 2205	International Cuisine	3
CULIN 2210	Contemporary a' la carte Cuisine	4
HOSP 1151	Restaurant Service and Sales	2
Total Credits		28

Culinology and Food Science, A.A.S.

Culinology is a relatively new field that blends culinary arts, food science, and food technology to prepare students for occupations engaged in food product development, food research, food manufacturing, food processing inspector or flavor developer. The A.A.S. in Culinary Arts and Food Science complements the Culinary Arts and Baking/Pastry degrees that develop skills in restaurant and bakery operations by introducing topics related to developing new foods, nutrition, processing technology and government regulations. The **Culinology & Food Science degree** requires a minimum of 64 credits in program requirements and general education requirements.

For more information about Culinary Arts, please visit the program page (<http://www.cod.edu/culinary/>).

Degree Requirements

Field of Study Code: CULIN.AAS.CULIN

Code	Title	Credits
Program Requirements		
CULIN 1101	Introduction to Culinary Arts	3
CULIN 1102	Regional American Cuisine	4
CULIN 1103	Fast Casual Dining Operations	2
CULIN 1108	Culinary Measurements & Conversions	2
CULIN 1109	Culinary and Baking Nutrition	1
CULIN 1120	Sanitation	1
CULIN 1170	Baking Science and Techniques	2
CULIN 1171	Baking Fundamentals	3
CULIN 1172	Pastry Fundamentals	3
CULIN 1180	Introduction-Culinology and Food Science	2
CULIN 1185	Elements of Taste and Flavor	3
CULIN 1186	Food Manufacturing and Processing	2
CULIN 2000	Food Laws and Regulations	2
CULIN 2152	Food, Beverage, and Equipment Purchasing	2
CULIN 2153	Garde Manger	3
CULIN 2205	International Cuisine	3

CULIN 2863	Internship (Career & Technical Ed)	3
HOSP 1151	Restaurant Service and Sales	2
Program Electives		
Select four credits from the following: ¹		4
CULIN 1105	Culinary Applications for Specialty Diet	
CULIN 2154	Advanced Garde Manger	
CULIN 2206	Asian Cuisine	
General Education		
Select 18 to 22 credits ¹		18-22
Total Credits		65-69

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Dental Hygiene

Area of Study

For more information about Dental Hygiene, please visit the program page (<http://www.cod.edu/denthygiene/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Dental Hygiene, A.A.S. (p. 82)

Dental Hygiene, A.A.S.

The **Dental Hygiene degree** prepares its graduates to provide comprehensive oral health care services in a variety of settings. Prior to completion of the dental hygiene program, students are eligible to take the National Dental Hygiene written examination and the Northeast Regional Clinical Board Examination and pass with a 75 percent on each exam. Upon successful completion of the program and passing of the National Dental Hygiene Examination and Regional Board Examination, graduates will be eligible to apply for mandatory state licensure. This degree requires 82 credits in program requirements and general education in the courses listed below.

For more information about Dental Hygiene, please visit the program page (<http://www.cod.edu/denthygiene/>).

This degree requires program application and admission; please visit the above link for details.

Degree Requirements

Field of Study Code: DEHYG.AAS

Code	Title	Credits
Program Requirements		
DEHYG 1101	Principles in Dental Hygiene I	3
DEHYG 1102	Principles in Dental Hygiene II	2

DEHYG 1105	Dental Materials/Expanded Functions	3
DEHYG 1112	Dental Radiology I	2
DEHYG 1115	Dental Tooth Anatomy and Morphology	2
DEHYG 1120	Preclinical Dental Hygiene I	1
DEHYG 1121	Clinical Dental Hygiene I	1
DEHYG 1125	Head & Neck Anat: Histology & Embryology	2
DEHYG 1135	Applied Nutrition & Biochemistry	2
DEHYG 1136	General and Oral Pathology	2
DEHYG 1145	Medical Emergencies in a Dental Office	1
DEHYG 2201	Dental Hygiene Theory I	2
DEHYG 2202	Dental Hygiene Theory II	2
DEHYG 2211	Periodontics I	2
DEHYG 2212	Periodontics II	2
DEHYG 2213	Dental Radiology II	2
DEHYG 2222	Clinical Dental Hygiene II	1
DEHYG 2223	Clinical Dental Hygiene III	2
DEHYG 2224	Clinical Dental Hygiene IV	2
DEHYG 2225	Review of Dental Literature	1
DEHYG 2232	Community Dental Health I	2
DEHYG 2233	Community Dental Health II	2
DEHYG 2235	Dental Pharmacology & Local Anesthetics	2
DEHYG 2245	Ethics and Jurisprudence: Practice Manag	2
ANAT 1551 & ANAT 1552	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
or ANAT 1571 & ANAT 1572	Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	
CHEM 1211	Survey of General Chemistry	5
or CHEM 1551	Principles of Chemistry I	
ENGL 1101	English Composition I	3
MATH 1102	Mathematics for Health Sciences	3
MICRO 1420	Microbiology	4
PSYCH 1100	General Psychology	3
SOCIO 1100	Introduction to Sociology	3
SPEEC 1100	Fundamentals of Speech Communication	3
General Education		
Select five credits ^{1,2}		5
Total Credits		82

¹ In addition to the courses listed above.

² 2 credits in either Global/Multicultural Studies or Contemporary Life Skills and 3 credits in Humanities and Fine Arts

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Diagnostic Medical Imaging Nuclear Medicine

Area of Study

For more information about Diagnostic Medical Imaging Nuclear Medicine, please visit the program page (<https://cod.edu/academics/programs/nuclear-medicine/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Computed Tomography (CT), Certificate (p. 83)
- Nuclear Medicine Technology, Certificate (p. 83)

Computed Tomography (CT), Certificate

The **Computed Tomography (CT) certificate** provides the student with the required course work and clinical practice to perform as a Computed Tomography (CT) technologist in medical imaging departments of hospitals, medical centers, and free standing medical imaging facilities. Upon successful completion of the program, students are eligible to take the American Registry of Radiologic Technologists (ARRT) for certification. In addition, the CT graduates must also obtain licensure in the State of Illinois with IEMA (Illinois Emergency Management Agency). This certificate requires 18 credits in the courses listed below.

For more information about Diagnostic Medical Imaging Nuclear Medicine, please visit the program page (<https://cod.edu/academics/programs/nuclear-medicine/>).

This certificate requires program application and admission; please visit the above link for details.

Certificate Requirements

Field of Study Code: DMIN.CER.CTOMO

Code	Title	Credits
DMIN 2500	Sectional Anatomy and Pathology for Ct	3
DMIN 2501	CT Principles & Patient Care	3
DMIN 2502	Physics and Instrumentation for Ct	3
DMIN 2503	Radiation Safety/Quality Mgmt. for CT	3
DMIN 2511	Clinical Applications of CT I	3
DMIN 2512	Clinical Applications of CT II	3
Total Credits		18

Nuclear Medicine Technology, Certificate

The **Nuclear Medicine Technology certificate** involves clinical education. Upon successful completion of the program, students are eligible for two certification boards: American Registry of Radiologic Technologists (ARRT) and Nuclear Medicine Technologist Certification Board (NMTCB).

In addition, graduates must also obtain licensure in the State of Illinois with IEMA (Illinois Emergency Management Agency). This certificate program consists of 40 credits in the courses listed below.

For more information about Diagnostic Medical Imaging Nuclear Medicine, please visit the program page (<https://cod.edu/academics/programs/nuclear-medicine/>).

This certificate requires program application and admission; please visit the above link for details.

Certificate Requirements

Field of Study Code: DMIN.CER

Code	Title	Credits
DMIN 1100	Basics of Nuclear Medicine	3
DMIN 1101	Physics & Instrumentation Nuclear Medicine	6
DMIN 1102	Nuclear Medicine Radiopharmacy	6
DMIN 1103	Radiation Biology & Safety Bridge	2
DMIN 1111	Clinical Nuclear Medicine I	3
DMIN 2200	Nuclear Medicine Procedures II	4
DMIN 2202	Nuclear Medicine Procedures III	4
DMIN 2211	Clinical Nuclear Medicine II	3
DMIN 2212	Clinical Nuclear Medicine III	3
DMIR 2220	Sectional Anatomy for Diagnostic Imaging	2
DMIN 2221	PET/CT	3
DMIN 2222	Nuclear Medicine Review Seminar	1
Total Credits		40

Diagnostic Medical Imaging Radiography

Area of Study

For more information about Diagnostic Medical Imaging Radiography, please visit the program page (<https://cod.edu/academics/programs/radiography/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Diagnostic Medical Imaging Radiography, A.A.S. (p. 83)
- Mammography, Certificate (p. 84)

Diagnostic Medical Imaging Radiography, A.A.S.

The Radiologic Technology program (DMIR) in diagnostic medical radiography (X-ray technology) includes extensive clinical experience. Upon successful completion of the program, students are eligible for certification through the American Registry of Radiologic Technologists (ARRT); licensure is required for employment in the field in the state of Illinois through the Illinois Emergency Management Agency (IEMA). This

program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

Students must achieve a grade of C or better in all DMIR courses to earn an Associate of Applied Science (AAS) degree in DMIR.

For more information about Diagnostic Medical Imaging Radiography, please visit the program page (<https://cod.edu/academics/programs/radiography/>).

This degree requires program application and admission; please visit the above link for details.

Degree Requirements

Field of Study Code: DMIR.AAS

Code	Title	Credits
Program Requirements		
DMIR 1100	Introduction to DMIR	2
DMIR 1111	Clinical Education I	1
DMIR 1112	Clinical Education II	2
DMIR 1113	Clinical Education III	2
DMIR 1121	Radiographic Equipment	4
DMIR 1122	Image Formation and Evaluation	5
DMIR 1131	Radiographic Procedures I	4
DMIR 1132	Radiographic Procedures II	3
DMIR 1133	Radiographic Procedures III	3
DMIR 1145	Ethics, Law & Basic Pharmacology	1
DMIR 2201	Radiation Physics, Biology & Protection	3
DMIR 2211	Clinical Education IV	1
DMIR 2212	Clinical Education V	3
DMIR 2213	Clinical Education VI	3
DMIR 2225	Basic Pathophysiology	3
DMIR 2235	Quality Management in Diagnostic Imaging	2
DMIR 2240	Radiographic Image Analysis	3
Select one of the following:		4
ANAT 1500	Survey of Human Anatomy and Physiology	
ANAT 1551	Human Anatomy and Physiology I	
ANAT 1571	Anatomy and Physiology With Cadaver I	
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
HLTH 1110	Biomedical Terminology	3
Select one of the following:		3
SPEEC 1100	Fundamentals of Speech Communication	
SPEEC 1120	Small-Group Communication	
SPEEC 1150	Introduction to Business Communication	
General Education		
Select 3 credits in Humanities ¹		3
Select 3-5 credit hours in Math ^{1,2}		3-5
Select 3 credits in Social and Behavioral Sciences ¹		3
Total Credits		70-72

¹ In addition to the courses listed above.

² MATH 1102 Mathematics for Health Sciences and MATH 1120 Mathematical Foundations for Diagnostic Medical Imaging Sonographers will fulfill this degree requirement.

Students must achieve a grade of C or better in all DMIR courses to earn an AAS degree in Diagnostic Medical Imaging Radiography.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Mammography, Certificate

The **Mammography certificate** at College of DuPage is a one semester, advanced certificate program that is designed to provide students with the necessary skills to become certified by the American Registry of Radiologic Technologists and meet the Mammography Quality Standards Act guidelines. This certificate requires seven credits in the courses listed below.

For more information about Diagnostic Medical Imaging Radiography, please visit the DMIR (<https://cod.edu/academics/programs/radiography/>) program page (<https://cod.edu/academics/programs/radiography/>) or the Mammography program page (<https://www.cod.edu/mammography/>).

This certificate requires program application and admission; please visit the above link for details.

Certificate Requirements

Field of Study Code: DMIR.CER.MAMM

Code	Title	Credits
DMIR 2400	Clinical Applications of Mammography	2
DMIR 2402	Breast Anatomy, Physiology and Pathology	1
DMIR 2403	Mammography Principles and Procedures	2
DMIR 2404	Mammography Quality Management & Instrumentation	2
Total Credits		7

Diagnostic Medical Imaging Sonography

Area of Study

For more information about Diagnostic Medical Imaging Sonography, please visit the program page (<https://cod.edu/academics/programs/sonography/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Diagnostic Medical Imaging Sonography (Ultrasound), Certificate (p. 85)

- Diagnostic Medical Imaging Sonography, A.A.S. (p. 85)
- Diagnostic Medical Vascular Sonography, Certificate (p. 86)

Diagnostic Medical Imaging Sonography (Ultrasound), Certificate

The Diagnostic Medical Imaging Sonography (Ultrasound) is an advanced certificate program designed for graduates of accredited Medical Imaging programs in Radiology, Nuclear Medicine, Nursing, etc. Clinical education is provided at assigned clinical affiliates. Upon successful completion of the program, students are eligible to obtain licensure in American Registry for Diagnostic Medical Sonography (ARDMS) in the following: Sonography Principles & Instrumentation (SPI); Physics Instrumentation; Abdomens & Superficial Structures; and Obstetrics and Gynecology. The certificate program consists of 40 credits in the required courses listed below.

For more information about Diagnostic Medical Imaging Sonography, please visit the program page (<https://cod.edu/academics/programs/sonography/>).

This certificate requires program application and admission; please visit the above link for details.

Certificate Requirements

Field of Study Code: DMIS.CER

Code	Title	Credits
DMIS 1100	Intro to Diagnostic Medical Sonography	3
DMIS 1101	Sonographic Physics & Instrumentation I	3
DMIS 1102	Sonographic Physics & Instrumentation II	3
DMIS 1112	Clinical Education II	3
DMIS 1113	Clinical Education III	2
DMIS 1114	Clinical Education IV	3
DMIS 1120	Sonographic Cross-Sectional Anatomy	3
DMIS 1121	Fundamentals of OB/GYN I	3
DMIS 1122	Fundamentals of OB/GYN II	3
DMIS 1131	Abdomen/Superficial Structures I	3
DMIS 1132	Abdomen/Superficial Structures II	2
DMIS 1140	Fundamentals of Breast Sonography	2
DMIS 1141	Case Study Critique I	1
DMIS 1142	Case Study Critique II	1
DMIS 1151	Hands-On Scanning Lab 1	1
DMIS 1152	Hands-On Scanning Lab 2	1
DMIS 1153	Hands-On Scanning Lab 3	1
DMIS 1154	Hands-On Scanning Lab 4	1
DMIS 1160	Legal Issues of Health Care-Sonography	1
Total Credits		40

Diagnostic Medical Imaging Sonography, A.A.S.

The **Diagnostic Medical Imaging Sonography** program includes extensive didactic and clinical applications in the specialties of general and

vascular sonography. Clinical applications include abdominal/superficial structures, obstetrics/gynecology and vascular imaging techniques. Upon successful completion of the program, students are eligible to obtain licensure in American Registry for Diagnostic Medical Sonography (ARDMS) in the following: Sonography Principles & Instrumentation (SPI) Physics Instrumentation; Abdomens & Superficial Structures; Obstetrics and Gynecology; and Vascular Technology. This degree requires 85 credits in program requirements and general education. All general education courses must be completed prior to admission to the sonography program.

For more information about Diagnostic Medical Imaging Sonography, please visit the program page (<https://cod.edu/academics/programs/sonography/>).

This degree requires program application and admission; please visit the above link for details.

Degree Requirements

Field of Study Code: DMIS.AAS

Code	Title	Credits
Program Requirements		
DMIS 1100	Intro to Diagnostic Medical Sonography	3
DMIS 1101	Sonographic Physics & Instrumentation I	3
DMIS 1102	Sonographic Physics & Instrumentation II	3
DMIS 1105	Intro to Pathophysiology for Sonographer	2
DMIS 1110	Patient Care Skills for Sonographers	2
DMIS 1112	Clinical Education II	3
DMIS 1113	Clinical Education III	2
DMIS 1114	Clinical Education IV	3
DMIS 1120	Sonographic Cross-Sectional Anatomy	3
DMIS 1121	Fundamentals of OB/GYN I	3
DMIS 1122	Fundamentals of OB/GYN II	3
DMIS 1131	Abdomen/Superficial Structures I	3
DMIS 1132	Abdomen/Superficial Structures II	2
DMIS 1140	Fundamentals of Breast Sonography	2
DMIS 1141	Case Study Critique I	1
DMIS 1142	Case Study Critique II	1
DMIS 1151	Hands-On Scanning Lab 1	1
DMIS 1152	Hands-On Scanning Lab 2	1
DMIS 1153	Hands-On Scanning Lab 3	1
DMIS 1154	Hands-On Scanning Lab 4	1
DMIS 1160	Legal Issues of Health Care-Sonography	1
DMIS 2201	Abdominal and Peripheral Arterial	3
DMIS 2203	Cerebrovascular Ultrasound	2
DMIS 2204	Abdominal and Peripheral Venous	2
DMIS 2212	Clinical Education - Vascular Imaging 1	3
DMIS 2213	Clinical Education - Vascular Imaging 2	
DMIS 2221	Abdominal & Peripheral Arterial Hands-On	1
DMIS 2223	Cerebrovascular Ultrasound Hands-On Scan	1
DMIS 2224	Abdominal & Peripheral Venous Hands-On	1
Select one of the following sequences:		8
ANAT 1551 & ANAT 1552	Human Anatomy and Physiology I and Human Anatomy and Physiology II	

ANAT 1571 & ANAT 1572	Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	
ENGL 1101	English Composition I	3
HLTH 1110	Biomedical Terminology	3
MATH 1120	Mathematical Foundations for Diagnostic Medical Imaging Sonographers	3
PSYCH 1100	General Psychology	3
SPEEC 1100 or SPEEC 1120	Fundamentals of Speech Communication Small-Group Communication	3
General Education		
Select three credits ¹		3
Total Credits		83

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Diagnostic Medical Vascular Sonography, Certificate

The **Diagnostic Medical Vascular Sonography** program is an extension of the current Diagnostic Medical Imaging program designed to provide trained sonographers in the specialty of vascular imaging for the clinical institutions and clinics in the Chicago area. Upon successful completion of the program, students are eligible to obtain licensure in American Registry for Diagnostic Medical Sonography (ARDMS) in the following: Sonography Principles & Instrumentation (SPI) Physics Instrumentation and Vascular Technology. This certificate program consists of 15 credits in the required courses listed below.

For more information about Diagnostic Medical Imaging Sonography, please visit the program page (<https://cod.edu/academics/programs/sonography/>).

This certificate requires program application and admission; please visit the above link for details.

Certificate Requirements

Field of Study Code: DMIS.CER.VASC

Code	Title	Credits
DMIS 2201	Abdominal and Peripheral Arterial	3
DMIS 2203	Cerebrovascular Ultrasound	2
DMIS 2204	Abdominal and Peripheral Venous	2
DMIS 2212	Clinical Education - Vascular Imaging 1	3
DMIS 2213	Clinical Education - Vascular Imaging 2	2
DMIS 2221	Abdominal & Peripheral Arterial Hands-On	1
DMIS 2223	Cerebrovascular Ultrasound Hands-On Scan	1
DMIS 2224	Abdominal & Peripheral Venous Hands-On	1
Total Credits		15

Early Childhood Education and Care

Area of Study

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/ecec/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Early Childhood Administration, A.A.S. (p. 86)
- Early Childhood Education and Care Administrator, Certificate (p. 87)
- Early Childhood Education and Care Advanced, Certificate (p. 87)
- Early Childhood Education and Care, A.A.S. (p. 88)
- Early Childhood Education and Care, Certificate (p. 87)
- Family Child Care Provider, Certificate (p. 88)
- Infant, Toddler and Two-Year Old Child Care, Certificate (p. 88)
- Multicultural Education and Care for the Young Child, Certificate (p. 89)
- School-Age Child Care, Certificate (p. 89)

Early Childhood Administration, A.A.S.

The **Early Childhood Administration** degree prepares students for employment in the management of early childhood and school-age programs. Students acquire the skills and knowledge to administrate programs serving infants, toddlers, preschool, and school-age children. This program includes the courses in the Administration of an Early Childhood Center certificate. Upon successful completion of this degree, students are eligible to apply for the Gateways Illinois Director's Credential Level 1 and ECE Credential Level 2. This degree program requires a minimum of 64 credits in program requirements, program electives, and general education in the courses listed below.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/ecec/>).

Degree Requirements

Field of Study Code: ECEC.AAS.ADMIN

Code	Title	Credits
Program Requirements		
ECEC 1100	Intro to the Early Childhood Profession	3
ECEC 1101	Growth & Development of the Young Child	3
ECEC 1102	Child Guidance Practices	3
ECEC 1116	Care Infant Toddler & Two-Year Child I	3
ECEC 1163	Practicum: At-Risk Early Childhood Prog	1
ECEC 2245	Preschool Methods of Intentional Teaching and Learning	4
ECEC 2210	The Young Child With Special Needs	2
ECEC 2211	Child Health, Safety and Nutrition	3

ECEC 2221	Early Childhood Administration Practicum	4
ECEC 2251	Curriculum Planning for the Young Child	3
ECEC 2252	Child/Family/Community Relations & Resources	3
ECEC 2254	Administration of an Early Childhood Center - Program Operations	3
ECEC 2255	Administration of an Early Childhood Center - Practices & Procedures	3
ECEC 2256	Administration of an Early Childhood Center - Staff, Families, & Children	3

Program Electives

Select three credits in Early Childhood Education and Care courses ¹	3

General Education

Select 20 to 21 credits ¹	20-21

Total Credits	64-65

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Early Childhood Education and Care Advanced, Certificate

Students pursuing the **Early Childhood Education and Care Advanced Certificate** will enhance the knowledge, skills, and experiences acquired in the Early Childhood Education and Care Certificate to more effectively work with children from birth to age eight. This advanced certificate meets the academic requirements to qualify students to be a lead teacher if the additional qualifications established by the Illinois Department of Children and Family Services are met. Students should consult their DCFS representative. Within this certificate, students will complete the required academic coursework to be eligible to apply for the Gateways Early Childhood Education Credential Level 3 through Gateways to Opportunity. This certificate requires a minimum of 36 credits in the courses listed below.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/eccec/>).

Certificate Requirements

Field of Study Code: ECEC.CER.ADV

Code	Title	Credits
ECEC 1100	Intro to the Early Childhood Profession	3
ECEC 1101	Growth & Development of the Young Child	3
ECEC 1102	Child Guidance Practices	3
ECEC 2211	Child Health, Safety and Nutrition	3
ECEC 2251	Curriculum Planning for the Young Child	3
ECEC 2252	Child/Family/Community Relations & Resources	3
ECEC 1151	Language and Literacy Development in a Diverse Classroom	3
ECEC 1116	Care Infant Toddler & Two-Year Child I	3

ENGL 1101	English Composition I	3
SPEEC 1100	Fundamentals of Speech Communication	3
PSYCH 1100	General Psychology	3
or SOCIO 1100	Introduction to Sociology	

Select one of the following Math courses. Check for transferability: **3-4**

ECEC 2208	Mathematics for the Young Child
MATH 1100	Business Mathematics
MATH 1218	General Education Mathematics
MATH 1321	Mathematics for Elementary School Teachers I

Total Credits	36-37

Early Childhood Education and Care, Certificate

Students who complete the **Early Childhood Education and Care Certificate** will be equipped with the knowledge, skills and experience necessary to be an assistant teacher in a variety of early childhood programs. Successful completion of this certificate meets the academic requirements of the Illinois Department of Children and Family Services (IDCFS). Upon completion, students will be eligible to apply for the Gateways Early Childhood Education Credential Level 2 through Gateways to Opportunity. This certificate requires 18 credits in the courses listed below.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/eccec/>).

Certificate Requirements

Field of Study Code: ECEC.CER.ECEC

Code	Title	Credits
ECEC 1100	Intro to the Early Childhood Profession	3
ECEC 1101	Growth & Development of the Young Child	3
ECEC 2211	Child Health, Safety and Nutrition	3
ECEC 2252	Child/Family/Community Relations & Resources	3
ENGL 1101	English Composition I	3
SPEEC 1100	Fundamentals of Speech Communication	3
Total Credits		18

Early Childhood Education and Care Administrator, Certificate

Completion of the **Early Childhood Education and Care Administrator certificate**, with either an AAS Degree in Early Childhood Education and Care (ECEC) or completion of 64 semester hours of credit from an accredited college or university. The certificate requires 23 credits in early childhood education to meet the academic requirements for Illinois Department of Children and Family Services (IDCFS) Director Qualifications effective July 1, 2017.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/eccec/>).

Certificate Requirements

Field of Study Code: ECEC.CER.ADMIN

Code	Title	Credits
ECEC 1100	Intro to the Early Childhood Profession	3
ECEC 1101	Growth & Development of the Young Child	3
ECEC 2210	The Young Child With Special Needs	2
ECEC 2211	Child Health, Safety and Nutrition	3
ECEC 2251	Curriculum Planning for the Young Child	3
ECEC 2254	Administration of an Early Childhood Center - Program Operations	3
ECEC 2255	Administration of an Early Childhood Center - Practices & Procedures	3
ECEC 2256	Administration of an Early Childhood Center - Staff, Families, & Children	3
Total Credits		23

Early Childhood Education and Care, A.A.S.

The **Early Childhood Education and Care** program prepares students to enter the early childhood education and early childhood field. Students acquire the skills, knowledge and attitudes to work with infants, toddlers, preschool-age and school-age children. Jobs for degree and certificate graduates are widely available in child care centers, preschools, park districts and public schools. This degree program requires a minimum of 64 credits in program requirements, program electives, electives and general education in the courses listed below.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/ecec/>).

Degree Requirements

Field of Study Code: ECEC.AAS

Code	Title	Credits
Program Requirements		
ECEC 1100	Intro to the Early Childhood Profession	3
ECEC 1101	Growth & Development of the Young Child	3
ECEC 1102	Child Guidance Practices	3
ECEC 1151	Language and Literacy Development in a Diverse Classroom	3
ECEC 2211	Child Health, Safety and Nutrition	3
ECEC 1116	Care Infant Toddler & Two-Year Child I	3
ECEC 2251	Curriculum Planning for the Young Child	3
ECEC 2252	Child/Family/Community Relations & Resources	3
ECEC 2245	Preschool Methods of Intentional Teaching and Learning	4
ECEC 2220	Early Childhood Education Practicum	4
Program Electives		
Select six credits in Early Childhood Education and Care courses ¹		6
Electives		
Select from any 1000- or 2000-level courses ¹		5-6

General Education	
Select 21 credits ¹	21
Total Credits	64-65

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Family Child Care Provider, Certificate

Students choose the **Family Child Care Provider certificate** to gain specific knowledge and skills in this early childhood specialty. Students may have previously received an early childhood certificate or degree or may choose this certificate to begin their early childhood education. This certificate requires 15 credits in the courses listed below.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/ecec/>).

Certificate Requirements

Field of Study Code: ECEC.CER.FAMCC

Code	Title	Credits
Program Requirements		
ECEC 1101	Growth & Development of the Young Child	3
ECEC 1120	Family Child Care Management	2
ECEC 1121	Family Child Care Curriculum & Guidance	2
ECEC 2211	Child Health, Safety and Nutrition	3
Program Electives		
Select five credits in Early Childhood Education and Care courses ¹		5
Total Credits		15

¹ In addition to the courses listed above.

Infant, Toddler and Two-Year Old Child Care, Certificate

Students choose the **Infant, Toddler and Two-Year Old Child Care certificate** to gain specific knowledge and skills in this early childhood specialty. Students may have previously received an early childhood certificate or degree or may choose this certificate to begin their early childhood education. This certificate requires 12 credits in the courses listed below.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/ecec/>).

Certificate Requirements

Field of Study Code: ECEC.CER.TODD

Code	Title	Credits
ECEC 1101	Growth & Development of the Young Child	3
ECEC 1116	Care Infant Toddler & Two-Year Child I	3
ECEC 1117	Care Infant, Toddler & Two-Year Child II	3
ECEC 2211	Child Health, Safety and Nutrition	3
Total Credits		12

Multicultural Education and Care for the Young Child, Certificate

Students choose the **Multicultural Education and Care for the Young Child certificate** to gain specific knowledge and skills working with diverse populations of children. Students will have previously received early childhood credits or may choose this certificate to begin their Early Childhood Education and Care studies. This certificate requires 14 credits in the courses listed below.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/eccec/>).

Certificate Requirements

Field of Study Code: ECEC.CER.MULTI

Code	Title	Credits
ECEC 1101	Growth & Development of the Young Child	3
ECEC 1102	Child Guidance Practices	3
ECEC 1161	Multicultural Curriculum for Young Child	2
ECEC 1162	Multicultural Perspectives Child Devlpmt	2
ECEC 1163	Practicum: At-Risk Early Childhood Prog	1
ECEC 2252	Child/Family/Community Relations & Resources	3
Total Credits		14

School-Age Child Care, Certificate

Students choose the **School-Age Child Care certificate** to gain specific knowledge and skills in this early childhood specialty. Students may have previously received an early childhood certificate or degree or may choose this certificate to begin their early childhood education. This certificate requires 16 credits in the courses listed below.

For more information about Early Childhood Education and Care, please visit the program page (<http://www.cod.edu/eccec/>).

Certificate Requirements

Field of Study Code: ECEC.CER.SCHCC

Code	Title	Credits
Program Requirements		
ECEC 2211	Child Health, Safety and Nutrition	3
ECEC 2226	Development of the School-Age Child	2
ECEC 2227	Guidance of the School-Age Child	2
ECEC 2228	Activities for School-Age Children	2
ECEC 2252	Child/Family/Community Relations & Resources	3

Program Electives

Select four credits in Early Childhood Education and Care courses ¹	4

Total Credits	16

¹ In addition to the courses listed above.

Earth Science

Area of Study

For more information about Earth Science, please visit the program page (<http://www.cod.edu/earth-science/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Astronomy Transfer Pathway, AS (<https://catalog.cod.edu/programs-study/earth-science/earth-science-astronomy-transfer-pathway-as/>)
- Earth Science Transfer Pathway, AS (<https://catalog.cod.edu/programs-study/earth-science/exploring-earth-science-transfer-pathway-as/>)
- Geology Transfer Pathway, AS (<https://catalog.cod.edu/programs-study/earth-science/earth-science-geology-transfer-pathway-as/>)
- Meteorology Transfer Pathway, AS (<https://catalog.cod.edu/programs-study/earth-science/earth-science-meteorology-transfer-pathway-as/>)
- Weather Hazards and Preparedness, Certificate (p. 89)

Weather Hazards and Preparedness, Certificate

Impacts of hazardous weather as it relates to human activity, business, and emergency management. Physical causes and effects of extreme weather and climate, along with societal mitigation, preparedness, and response to hazardous weather events will be explored. This certificate requires a minimum of 16 credits in the courses listed below.

For more information about Earth Science, please visit the program page (<http://www.cod.edu/earth-science/>).

Certificate Requirements

Field of Study Code: EARTH.CER

Code	Title	Credits
Program Requirements		
EARTH 1111	Climate and Global Change	3
EARTH 1115	Severe and Unusual Weather	4
EARTH 1116	Weather Analysis and Forecasting I	1
EARTH 1119	Weather Impacts and Preparedness	3
CRIMJ 1148	Emergency Management I	3
Program Electives		
Select two to three credits from the following:		2-3
CRIMJ 2130	Emergency Management II	

EARTH 1117	Weather Analysis and Forecasting II	
EARTH 2116	Adv Weather Analysis & Forecasting I	
GEOGR 1151	Geographic Information Systems I	
Total Credits		16-17

Education

Area of Study

For more information about Education, please visit the program page (<http://www.cod.edu/education/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Education Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/education/education-transfer-pathway-aa/>)
- Paraprofessional in Education, Certificate (p. 90)
- Teaching Online Utilizing Technology (TOUT), Certificate (p. 90)

Paraprofessional in Education, Certificate

The Paraprofessional certificate is designed to prepare individuals to take on the role of a paraprofessional, also known as a teacher's assistant, in a K-12 classroom. Students will take a variety of classes to introduce them to aspects of teaching and learning that will help them to be successful as a paraprofessional. Additional requirements must be met for Illinois licensure. This certificate requires 21 credits in the courses listed below.

For more information about Education, please visit the program page (<http://www.cod.edu/education/>).

Certificate Requirements

Field of Study Code: EDUCA.CER.PARAP

Code	Title	Credits
EDUCA 1100	Introduction to Education	3
EDUCA 2201	Education for Exceptional Children	3
PSYCH 2220 or EDUCA 2220	Educational Psychology Instructional Psychology	3
EDUCA 2230	Diversity in K-12 Schools	3
PSYCH 1100	General Psychology	3
EDUCA 1101	School Procedure	3
EDUCA 1150	Technology Integration in K-12 Schools	3
Total Credits		21

Teaching Online Utilizing Technology (TOUT), Certificate

This certificate provides a hands-on experience in designing and implementing online course materials within a learning management system. Students will focus on instructional design, visual literacy, online assessments, current collaborative and multimedia practices

while designing accessible, engaging learning materials. This certificate requires 10 credits in the courses listed below.

For more information about Education, please visit the program page (<http://www.cod.edu/education/>).

Certificate Requirements

Field of Study Code: EDUCA.CER.TOUT

Code	Title	Credits
EDUCA 2700	Best Practices in Online Education	4
EDUCA 2710	Multimedia Applications in Education	3
EDUCA 2720	Course Design for Online Education	3
Total Credits		10

Electro-Mechanical Technology

Area of Study

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Advanced Mechatronics, Certificate (p. 90)
- Electrician Apprenticeship, A.A.S. (p. 91)
- Electrician's Preparation, Certificate (p. 91)
- Electro-Mechanical Technology, A.A.S. (p. 91)
- Mechanical Maintenance, Certificate (p. 92)
- Mechatronics Technology (MET), Certificate (p. 92)
- Process Control Instrumentation, Certificate (p. 92)
- Programmable Logic Controllers in Automation, Certificate (p. 93)

Advanced Mechatronics, Certificate

The **Advanced Mechatronics certificate** provides students with multidisciplinary skills in the areas of mechanics, electricity, electronics, instrumentation, robotics, and manufacturing. This certificate prepares students for careers in industrial mechatronics.

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Certificate Requirements

Field of Study Code: ELMEC.CER.ADVMEC

Code	Title	Credits
Program Requirements		
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1110	Motor & Generator Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 1420	Drive Components	2

ELMEC 2510	Process and Automation Controls	3
ELMEC 2520	Industrial Control and Data Acquisition	3
ELMEC 1106	Power Electricity and Rotating Machines	4
Electives		
Select one of the following:		
ELMEC 1130	Industrial Electricity	3
ELMEC 1150	National Electrical Code	
ELMEC 1171	Introduction to Robotic Technology	
ELMEC 2600	Motion Control: Motor Dr Application and Control	
Total Credits		27

Electrician Apprenticeship, A.A.S.

The Electrician Apprenticeship degree, in partnership with the Joint Apprenticeship and Training Committee (JATC) of the International Brotherhood of Electrical Workers (IBEW) Local Union, is open only to individuals admitted into the Electrician Apprenticeship Program of the IBEW. This degree will fulfill the classroom component of the IBEW/JATC apprenticeship experience. This program requires a minimum of 64 credits in program requirements and general education as listed below.

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Degree Requirements

Field of Study Code: ELMEC.AAS.ELECA

Code	Title	Credits
Program Requirements		
ELMEC 1110	Motor & Generator Fundamentals	3
ELMEC 1130	Industrial Electricity	3
ELMEC 1150	National Electrical Code	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 2860	Internship (Career & Technical Ed)	1-4
ELMEC 2863	Internship (Career & Technical Ed)	3
ELMEC 2864	Internship (Career & Technical Ed)	4
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1101	Circuits I	3
ELECT 1120	Electronic Documentation and Fabrication	3
ELECT 1130	Electronics Materials and Fabrication	2
ELECT 1141	Digital Fundamentals	3
ELECT 1151	Electronic Devices and Applications	4
ELECT 2220	Electronic Instruments, Measurements, And Control	3
MANUF 1101	Industrial Design/CAD	3
MANUF 2280	Industrial Safety	2
General Education		
Select 19-22 credits, including 2 semester hours in Global/Multicultural Studies or Contemporary Life Skills. ¹		19-22
Total Credits		65-71

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Electrician's Preparation, Certificate

The Electrician's Preparation Certificate provides knowledge, skills, and competencies to students for work in the residential, commercial, and industrial wiring fields. The National Electric Code (NEC), residential wiring, commercial wiring, and industrial wiring are studied. This certificate prepares students to take a municipal electrical code licensing exam. This certification does not provide licensing to perform electrical work.

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Certificate Requirements

Field of Study Code: ELMEC.CER.EPREP

Code	Title	Credits
Program Requirements		
ELMEC 1120	Residential Wiring	3
ELMEC 1150	National Electrical Code	3
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1130	Industrial Electricity	3
ELECT 2112	Motor Control and Industrial Wiring	3
ELMEC 1171	Introduction to Robotic Technology	3
Total Credits		18

¹ In addition to the courses listed above.

Electro-Mechanical Technology, A.A.S.

The **Electro-Mechanical Technology** degree prepares students to enter the industrial and manufacturing workplace with knowledge and skill levels in three areas: programmable controllers, process control instrumentation and mechanical maintenance.

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Degree Requirements

Field of Study Code: ELMEC.AAS.ELMET

Code	Title	Credits
Program Requirements		
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1101	Circuits I	3
ELECT 1151	Electronic Devices and Applications	4
ELMEC 1101	Survey of Automation	3
ELMEC 1106	Power Electricity and Rotating Machines	4
ELMEC 1110	Motor & Generator Fundamentals	3

ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1171	Introduction to Robotic Technology	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 1420	Drive Components	2
ELMEC 2410	Programmable Controller II (PLC II)	3
ELMEC 2510	Process and Automation Controls	3
ELMEC 2600	Motion Control: Motor Dr Application and Control	3

Program Electives

Select seven credits in Electro-Mechanical Technology or Electronics Technology ¹	7

General Education

Select 18 credits ¹	18

Total Credits	65

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Mechanical Maintenance, Certificate

Students earning the **Mechanical Maintenance certificate** learn skills in power trains, drive components, mechanical alignment of couplings, pumps and motors, and troubleshooting and repair of industrial components. This certificate requires 34 credits in the courses listed below.

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Certificate Requirements

Field of Study Code: ELMEC.CER.MECH

Code	Title	Credits
ELMEC 1101	Survey of Automation	3
ELMEC 1110	Motor & Generator Fundamentals	3
ELMEC 1130	Industrial Electricity	3
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1150	National Electrical Code	3
ELMEC 1171	Introduction to Robotic Technology	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 1420	Drive Components	2
ELECT 1100	Electricity and Electronics Fundamentals	3
MANUF 1104	Technical Mechanics	2
MANUF 1151	Machine Shop I	3
WELD 1100	Welding I	3
Total Credits		34

Mechatronics Technology (MET), Certificate

Mechatronics Technology (MET) is designed to develop skills to meet industry needs for multi-functional technicians competent in mechanics, computers, and electrical/electronic technologies.

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Certificate Requirements

Field of Study Code: ELMEC.CER.MECTEC

Code	Title	Credits
Program Requirements		
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1171	Introduction to Robotic Technology	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 1420	Drive Components	2
ELECT 2112	Motor Control and Industrial Wiring	3
ELMEC 2510	Process and Automation Controls	3
Total Credits		20

Process Control Instrumentation, Certificate

The Process Control Instrumentation Certificate prepares the student to inspect, calibrate, troubleshoot and repair various temperature, pressure, flow, and level measurement instruments. Students will also learn how to program process controllers to interface with process instrumentation.

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Certificate Requirements

Field of Study Code: ELMEC.CER.PROC

Code	Title	Credits
ELMEC 1110	Motor & Generator Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1171	Introduction to Robotic Technology	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 2410	Programmable Controller II (PLC II)	3
ELMEC 2510	Process and Automation Controls	3
ELMEC 2520	Industrial Control and Data Acquisition	3
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 2112	Motor Control and Industrial Wiring	3
Total Credits		27

Programmable Logic Controllers in Automation, Certificate

The Programmable Logic Controllers (PLCs) in Automation Certificate introduces students to programming and maintenance of various programmable controllers that are used in the automation industry.

For more information about Electro-Mechanical Technology, please visit the program page (<http://www.cod.edu/electro-mech/>).

Certificate Requirements

Field of Study Code: ELMEC.CER.PROLOG

Code	Title	Credits
Program Requirements		
ELMEC 1110	Motor & Generator Fundamentals	3
ELMEC 1171	Introduction to Robotic Technology	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 2410	Programmable Controller II (PLC II)	3
ELMEC 2510	Process and Automation Controls	3
ELMEC 2520	Industrial Control and Data Acquisition	3
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1102	Circuits II	4
ELECT 2112	Motor Control and Industrial Wiring	3
Total Credits		28

and electronics, including analog and digital circuits, microcomputers, and industrial automation.

For more information about Electronics Technology, please visit the program page (<http://www.cod.edu/electronics/>).

Certificate Requirements

Field of Study Code: ELECT.CER.ADVET

Code	Title	Credits
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1101	Circuits I	3
ELECT 1120	Electronic Documentation and Fabrication	3
ELECT 1141	Digital Fundamentals	3
ELECT 1151	Electronic Devices and Applications	4
ELECT 1161	Modern Communications	3
ELECT 2273	Embedded Systems & Microcontroller Programming	3
ELMEC 1106	Power Electricity and Rotating Machines	4
ELMEC 2510	Process and Automation Controls	3
ELMEC 2520	Industrial Control and Data Acquisition	3
Total Credits		32

Biomedical Engineering Technology, A.A.S.

The **Biomedical Engineering Technology degree** prepares students for careers as biomedical equipment technicians, (also known as biomedical engineering technicians) in hospitals, health agencies, businesses and industries that manufacture and maintain electronic and biomedical instrumentation equipment. This program prepares students to test, install, and maintain healthcare components such as rehabilitation and therapeutic products, medical imaging systems, and computer-based systems used in the biomedical technology field. This degree program requires 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Electronics Technology, please visit the program page (<http://www.cod.edu/electronics/>).

Degree Requirements

Field of Study Code: ELECT.AAS.BIOMED

Code	Title	Credits
Program Requirements		
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1101	Circuits I	3
ELECT 1102	Circuits II	4
ELECT 1141	Digital Fundamentals	3
ELECT 1151	Electronic Devices and Applications	4
ELECT 1221	Introduction to Biomedical Instrumentation Technology	3
ELECT 2221	Biomedical Instrumentation Technology and Applications	3
ANAT 1500	Survey of Human Anatomy and Physiology	4
ELMEC 2510	Process and Automation Controls	3

Electronics Technology

Area of Study

For more information about Electronics Technology, please visit the program page (<http://www.cod.edu/electronics/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Advanced Electronics Technology, Certificate (p. 93)
- Biomedical Engineering Technology, A.A.S. (p. 93)
- Electronics Engineering Technology, A.A.S. (p. 94)
- Electronics Technology, Certificate (p. 94)
- Industrial Controls and Automation, Certificate (p. 94)
- Renewable Energy Technology, Certificate (p. 95)

Advanced Electronics Technology, Certificate

The **Advanced Electronics Technology certificate** prepares students for an entry-level electronics and electricity technology position with basic skills and competencies in the field of analog and digital electrical and electronic devices. It provides students with fundamentals of electricity

HLTHS 1110	Biomedical Terminology	3
Program Electives		
Select 13 credits from the following (in addition to the courses listed above):		13
ELECT 1120	Electronic Documentation and Fabrication	
ELECT 1161	Modern Communications	
ELECT 1201	Renewable Energy Fundamentals	
ELMEC 1101	Survey of Automation	
ELMEC 1141	Hydraulics and Pneumatics	
ELMEC 1190	Intro to Programmable Logic Controllers	
General Education		
Select 18 credits (in addition to the courses listed above)		18
Total Credits		64

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Electronics Engineering Technology, A.A.S.

The **Electronics Engineering Technology degree** is designed to provide the student with fundamentals of electricity and electronics, including digital electronics and microcomputers, specialized manufacturing electronics, industrial automation and electronic communications. This program emphasizes a hands-on approach to learning through projects.

For more information about Electronics Technology, please visit the program page (<http://www.cod.edu/electronics/>).

Degree Requirements

Field of Study Code: ELECT.AAS

Code	Title	Credits
Program Requirements		
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1101	Circuits I	3
ELECT 1102	Circuits II	4
ELECT 1120	Electronic Documentation and Fabrication	3
ELECT 1141	Digital Fundamentals	3
ELECT 1151	Electronic Devices and Applications	4
ELECT 1161	Modern Communications	3
ELECT 2273	Embedded Systems & Microcontroller Programming	3
ELMEC 1106	Power Electricity and Rotating Machines	4
ELMEC 2510	Process and Automation Controls	3
Program Electives		
Select 14 credits from ELECT or ELMEC		14
General Education		
Select 18 credits ¹		18
Total Credits		65

¹ Each candidate for an Associate in Applied Science (A.A.S.) degree shall satisfactorily complete 18 credits in General Education.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Electronics Technology, Certificate

The **Electronics Technology certificate** provides the student with fundamentals of electricity and electronics, including digital electronics and microcomputers, specialized manufacturing electronics, industrial automation and electronic communications. This program emphasizes a hands-on approach to learning through projects to reinforce the theoretical material.

For more information about Electronics Technology, please visit the program page (<http://www.cod.edu/electronics/>).

Certificate Requirements

Field of Study Code: ELECT.CER

Code	Title	Credits
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1120	Electronic Documentation and Fabrication	3
ELECT 1141	Digital Fundamentals	3
ELECT 1151	Electronic Devices and Applications	4
ELECT 1161	Modern Communications	3
ELECT 2273	Embedded Systems & Microcontroller Programming	3
Total Credits		19

Industrial Controls and Automation, Certificate

The **Industrial Controls and Automation certificate** combines electronics knowledge and electro-mechanical skills. The certificate incorporates hands-on learning where practice follows theory in the lab environment. This certificate meets the needs of an entry level technician position. The certificate requires 25 credits in the courses listed below.

For more information about Electronics Technology, please visit the program page (<http://www.cod.edu/electronics/>).

Certificate Requirements

Field of Study Code: ELECT.CER.INDCA

Code	Title	Credits
Program Requirements		
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1101	Circuits I	3
ELECT 1141	Digital Fundamentals	3
ELECT 1151	Electronic Devices and Applications	4
ELMEC 1171	Introduction to Robotic Technology	3

ELMEC 1190	Intro to Programmable Logic Controllers	3
Program Electives		
Select six credits from the following (in addition to the courses listed above):		6
ELECT 2273	Embedded Systems & Microcontroller Programming	
ELMEC 1110	Motor & Generator Fundamentals	
ELMEC 2510	Process and Automation Controls	
ELMEC 2600	Motion Control: Motor Dr Application and Control	
Total Credits		25

Renewable Energy Technology, Certificate

The **Renewable Energy Technology certificate** is intended to train technicians in the field of electronics, electricity, mechanics, and computers related to the applications in the field of renewable and green energies. This certificate requires 14 credits in the courses listed below.

For more information about Electronics Technology, please visit the program page (<http://www.cod.edu/electronics/>).

Certificate Requirements

Field of Study Code: ELECT.CER.RENEW

Code	Title	Credits
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1201	Renewable Energy Fundamentals	2
ELECT 2001	Green Energy Systems	3
ELMEC 1140	Commercial and Industrial Wiring	3
ELMEC 1150	National Electrical Code	3
Total Credits		14

English

Area of Study

For more information about English, please visit the program page (<http://www.cod.edu/english/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Creative Writing, Certificate (p. 95)
- English Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/english/english-transfer-pathway-aa/>)
- Professional Writing, Certificate (p. 97)

Creative Writing, Certificate

The **Creative Writing Certificate** is a program concentration that seeks to expose learners to a variety of creative writing genres, including poetry,

creative nonfiction, drama, fiction, and screenwriting. Four tracks are offered in the program:

1. Poetry Writing,
2. Fiction Writing,
3. Creative Nonfiction Writing, and
4. Screenwriting.

For students in each track, Introduction to Creative Writing is required, followed by one genre writing course, one literature/theater course in the chosen track, one program elective, and one capstone course.

Our unique capstone options include a choice of **one** of the following:

ENGLI 2210, Literary Journal: Prairie Light Review: an experiential course where students oversee the production of the journal, including acquisitions, copy editing, design, and marketing;

ENGLI 2261, Writing for Publication: a market-driven course that exposes the inner-workings of the publishing industry to writers seeking to release their work to the world;

ENGLI 2860, Internship: a hands-on course where students work with employers on real-world creative writing projects that will impact the business's mission and/or bottom line.

MPTV 1820, The Business of Screenwriting: a market-driven course about the inner workings of the film industry as it relates to professional screenwriting including finding an agent, pitching, collaborating with producers and understanding contracts.

For more information about English, please visit the program page (<http://www.cod.edu/english/>).

Certificate Requirements

Field of Study Code: ENGLI.CER.CW

Code	Title	Credits
Program Requirements		
ENGLI 2250	Introduction to Creative Writing	3
Emphasis Courses		
Select one genre-writing course:		
ENGLI 2251	Fiction Writing	3
or ENGLI 2252	Poetry Writing	
or ENGLI 2253	Creative Nonfiction Writing	
or MPTV 2022	Screenwriting for Short Forms	
or MPTV 2032	Screenwriting for Feature Films	
Select one literature or theater course:		
ENGLI 1130	Introduction to Literature	3
or ENGLI 1135	Introduction to Film Art	
or ENGLI 1145	Film History	
or ENGLI 1150	Short Fiction	
or ENGLI 1151	Novel	
or ENGLI 1152	Poetry	
or ENGLI 1153	Drama	
or ENGLI 1154	Film As Literature	
or ENGLI 1156	Science Fiction	
or ENGLI 1157	Children's Literature	
or ENGLI 1159	Greek Mythology	

or ENGLI 1160	Native American Literature
or ENGLI 2226	World Literature
or ENGLI 2227	Modern European Literature
or ENGLI 2228	Shakespeare
or ENGLI 2234	Film Directors and Authorship
or ENGLI 2235	Film Genres
or ENGLI 2236	World Cinema
or THEAT 1100	Theater Appreciation
or THEAT 1105	Improvisational Acting
or THEAT 1111	Acting I
or THEAT 2211	Repertory Acting

Program Electives¹

Select three credits from the following: 3

ENGLI 1130	Introduction to Literature
ENGLI 1135	Introduction to Film Art
ENGLI 1145	Film History
ENGLI 1150	Short Fiction
ENGLI 1152	Poetry
ENGLI 1153	Drama
ENGLI 1154	Film As Literature
ENGLI 1156	Science Fiction
ENGLI 1157	Children's Literature
ENGLI 1159	Greek Mythology
ENGLI 1161	Multicultural Literatures of the U.S.
ENGLI 1165	Literature, Gender, and Sexualities
ENGLI 1820	Selected Topics I
ENGLI 2210	Creating a Literary Journal: Prairie Light Review
ENGLI 2220	British Literature to 1800
ENGLI 2221	British Literature From 1800 Through The Present
ENGLI 2223	American Literature From the Colonial Period to the Civil War
ENGLI 2224	American Literature From the Civil War to the Present
ENGLI 2226	World Literature
ENGLI 2228	Shakespeare
ENGLI 2234	Film Directors and Authorship
ENGLI 2251	Fiction Writing
ENGLI 2252	Poetry Writing
ENGLI 2253	Creative Nonfiction Writing
ENGLI 2261	Writing for Publication
ENGLI 2262	Non-Western Literature
MPTV 2022	Screenwriting for Short Forms
MPTV 2032	Screenwriting for Feature Films
THEAT 1100	Theater Appreciation
THEAT 1111	Acting I
THEAT 1105	Improvisational Acting
THEAT 2211	Repertory Acting

Capstone Course

ENGLI 2210	Creating a Literary Journal: Prairie Light Review	2-3
or ENGLI 2261	Writing for Publication	

or ENGLI 2860	Internship (Career & Technical Ed)
or MPTV 1820	Selected Topics I

Total Credits 14-15

¹ Students choose from a wide-range of literature courses to learn the techniques of published writers and develop deep reading skills. Theater electives develop characterization and dialog writing skills. Film courses assist in the study of plot, characterization, and visualization techniques. Students can also choose to take a genre writing course outside of their track.

Emphases

General Creative Writing Certificate

Code	Title	Credits
Genre Writing Course		

Required:

ENGLI 2253	Creative Nonfiction Writing	3
or ENGLI 2251	Fiction Writing	
or ENGLI 2252	Poetry Writing	
or MPTV 2022	Screenwriting for Short Forms	
or MPTV 2032	Screenwriting for Feature Films	

Literature/Theater Course

ENGLI 1130	Introduction to Literature	3
or ENGLI 1135	Introduction to Film Art	
or ENGLI 1145	Film History	
or ENGLI 1150	Short Fiction	
or ENGLI 1151	Novel	
or ENGLI 1152	Poetry	
or ENGLI 1153	Drama	
or ENGLI 1154	Film As Literature	
or ENGLI 1156	Science Fiction	
or ENGLI 1157	Children's Literature	
or ENGLI 1159	Greek Mythology	
or ENGLI 1160	Native American Literature	
or ENGLI 1161	Multicultural Literatures of the U.S.	
or ENGLI 1165	Literature, Gender, and Sexualities	
or ENGLI 2220	British Literature to 1800	
or ENGLI 2221	British Literature From 1800 Through The Present	
or ENGLI 2223	American Literature From the Colonial Period to the Civil War	
or ENGLI 2224	American Literature From the Civil War to the Present	
or ENGLI 2226	World Literature	
or ENGLI 2227	Modern European Literature	
or ENGLI 2228	Shakespeare	
or ENGLI 2234	Film Directors and Authorship	
or ENGLI 2235	Film Genres	
or ENGLI 2236	World Cinema	
or ENGLI 2262	Non-Western Literature	

Professional Writing, Certificate

The **Professional Writing certificate** offers students the opportunity to learn how to communicate effectively and apply their rhetoric and writing skills to a variety of professional audiences, such as business, industry, government, nonprofit, health care, and technology. Student are required to take one out of two composition courses (ENGLI 1101 Composition I or ENGLI 1102 Composition II), two out of three professional writing courses at the 1000-level (ENGLI 1105 Workplace Writing, ENGLI 1110 Technical Writing, ENGLI 1115 Digital Writing), two out of three at the 2000-level (ENGLI 2105 Writing in the Professions, ENGLI 2110 Editing in the Professions, ENGLI 2115 Writing for Nonprofits), and ENGLI 2400 ePortfolio in their graduating semester to curate their writing portfolio. This certificate requires 16 credits in the courses listed below.

For more information about English, please visit the program page (<http://www.cod.edu/english/>).

Certificate Requirements

Field of Study Code: ENGLI.CER.PROF

Code	Title	Credits
Program Required Courses		
Select one of the following courses:		3
ENGLI 1101	English Composition I	
ENGLI 1102	English Composition II	
Select two of the following courses:		6
ENGLI 1105	Workplace Writing	
ENGLI 1110	Technical Writing	
ENGLI 1115	Digital Writing	
Select two of the following courses:		6
ENGLI 2105	Writing in the Professions	
ENGLI 2110	Editing in the Professions	
ENGLI 2115	Writing for Nonprofits	
ENGLI 2400	ePortfolio ¹	1
Total Credits		16

¹ ENGLI 2400 ePortfolio should be taken in the final semester of the program.

Eye Care Assistant

Area of Study

For more information about Eye Care Assistant, please visit the program page (<http://www.cod.edu/eyecare/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Eye Care Assistant, Certificate (p. 97)

Eye Care Assistant, Certificate

The **Eye Care Assistant certificate** is designed to prepare students for entry-level positions as assistants in optometrist/ophthalmology practices. Under the supervision of a licensed eye care professional, eye care assistants render support services and aid in the treatment of eye conditions and diseases. The College intends to seek accreditation of the program, and once granted, graduates will then be prepared to sit for the certification examination administered by the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO). This certificate requires a minimum of 35 credits in the courses listed below.

For more information about Eye Care Assistant, please visit the program page (<http://www.cod.edu/eyecare/>).

Certificate Requirements

Field of Study Code: EYE.CER.ASST

Code	Title	Credits
EYE 1101	Principles of Eye Care Assistant I	8
EYE 1102	Principles of Eye Care Assistant II	8
EYE 1103	Principles of Eye Care Assistant III	9
Select one of the following:		4-8
ANAT 1500	Survey of Human Anatomy and Physiology	
ANAT 1551 & ANAT 1552	Human Anatomy and Physiology I and Human Anatomy and Physiology II	
ANAT 1571 & ANAT 1572	Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	
HLTHS 1110	Biomedical Terminology	3
SURGT 1000	Ethical Considerations in the Health Care Industry	3
Total Credits		35-39

Fashion Studies

Area of Study

For more information about Fashion Studies, please visit the program page (<http://www.cod.edu/fashion/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Fashion Design, A.A.S. (p. 97)
- Fashion Design, Certificate (p. 98)
- Fashion Entrepreneurship, Certificate (p. 98)
- Fashion Merchandising, A.A.S. (p. 98)
- Fashion Merchandising, Certificate (p. 99)

Fashion Design, A.A.S.

A Fashion Design degree allows a student to learn the skills and techniques used in making a fashion product from concept to completion. Careers can range from starting their own clothing line to entry level jobs in the industry. Many of our students go on to receive

a bachelor's degree at a four-year institution. This degree requires a minimum of 63 credits in program requirements, program electives, and general education in the courses listed below.

For more information about Fashion Studies, please visit the program page (<http://www.cod.edu/fashion/>).

Degree Requirements

Field of Study Code: FASHI.AAS.DESGN

Code	Title	Credits
Program Requirements		
FASHI 1551	Textiles for Fashion	3
FASHI 1201	Clothing Construction I	3
FASHI 1202	Clothing Construction II	3
FASHI 1301	Flat Pattern Drafting I	3
FASHI 1305	Design Concepts	3
FASHI 1315	Fashion Illustration I	3
FASHI 1325	Digital Design for Fashion	3
FASHI 2300	Flat Pattern Drafting II	3
FASHI 2301	Draping	3
FASHI 2302	Design Studio: Apparel	3
FASHI 1500	Fashions' History	3
or FASHI 2500	Modern Fashion History	3
Program Electives		
Select a minimum of 12 credits from Fashion Studies courses not listed above.		12
General Education		
Select 18 to 22 credits in addition to the courses listed above, including Global/Multicultural or Contemporary Life Skills.		18-22
Total Credits		63-67

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Fashion Design, Certificate

The Fashion Design Certificate provides a technical foundation in Fashion Design for the student who has an existing degree. The certificate requires 15 semester credit hours in Fashion Design concentrating in technical classes and 15 credits in program electives for a total of 30 credits.

For more information about Fashion Studies, please visit the program page (<http://www.cod.edu/fashion/>).

Certificate Requirements

Field of Study Code: FASHI.CER.DESGN

Code	Title	Credits
Program Requirements		
FASHI 1201	Clothing Construction I	3
FASHI 1305	Design Concepts	3
FASHI 1315	Fashion Illustration I	3
FASHI 1551	Textiles for Fashion	3

FASHI 1301	Flat Pattern Drafting I	3
Program Electives		
Select 15 semester credits from 1000-2000 level FASHI courses ¹		15
Total Credits		30

¹ Students wanting a design heavy curriculum should choose from the suggested electives below:

- FASHI 1202 Clothing Construction II
- FASHI 1325 Digital Design for Fashion
- FASHI 1500 Fashions' History
- FASHI 2300 Flat Pattern Drafting II
- FASHI 2301 Draping
- FASHI 2302 Design Studio: Apparel
- FASHI 1510 Fashion Product Development I

Fashion Entrepreneurship, Certificate

The students earning a Fashion Entrepreneurship Certificate often have the goal of becoming small business owners. Fifteen credits in required courses focus on the fundamental functions related to a small, creative startup. Nine credits in electives to focus on their career goals.

For more information about Fashion Studies, please visit the program page (<http://www.cod.edu/fashion/>).

Certificate Requirements

Field of Study Code: FASHI.CER.ENTRE

Code	Title	Credits
Program Requirements		
FASHI 1531	Business of Fashion	3
FASHI 1480	Business Practices for the Artisan Entrepreneur I	3
FASHI 2440	Fashion Trends and Forecasting	3
FASHI 2445	Brand Strategy for Fashion	3
FASHI 2465	Professional Practices for Fashion Merchandisers	3
Electives		
Any electives from the FASHI, MARKE, BUSIN, and/or MANAG curriculum that focus on their desired career goal		9
<i>For students pursuing a career involving the development of a clothing line, consider the following as course electives:</i>		
FASHI 1305	Design Concepts	
FASHI 1325	Digital Design for Fashion	
FASHI 1510	Fashion Product Development I	
Total Credits		24

Fashion Merchandising, A.A.S.

As a Fashion Merchandising major, emphasis will be on both the business and visual side of the fashion industry. Students can choose a course of study that is adapted to specific interests and job

opportunities for learning the necessary skills to assume positions in the industry or transfer to a four-year institution.

For more information about Fashion Studies, please visit the program page (<http://www.cod.edu/fashion/>).

Degree Requirements

Field of Study Code: FASHI.AAS.MERCH

Code	Title	Credits
Program Requirements		
FASHI 1430	Fashion Styling I	3
FASHI 1460	Visual Merchandising I	3
FASHI 1500 or FASHI 2500	Fashions' History Modern Fashion History	3
FASHI 1510	Fashion Product Development I	3
FASHI 1531	Business of Fashion	3
FASHI 1551	Textiles for Fashion	3
FASHI 2420	Fashion Promotion	3
FASHI 2440	Fashion Trends and Forecasting	3
FASHI 2445	Brand Strategy for Fashion	3
FASHI 2455	Future of Fashion Retail	3
Program Electives		15
In addition to the courses above students will be required to take 15 additional credits from Fashion Studies, Business, Management or Marketing courses		
General Education		18-22
18-22 GenEd credits in addition to those courses listed above		
Total Credits		63-67

Fashion Merchandising, Certificate

The Fashion Merchandising Certificate introduces students to the various facets of the business side of the fashion industry. Students will choose a course of study that is adapted to specific interests and job opportunities for learning the necessary skills to assume positions in the industry or transfer to a four-year institution.

For more information about Fashion Studies, please visit the program page (<http://www.cod.edu/fashion/>).

Certificate Requirements

Field of Study Code: FASHI.CER.MERCH

Code	Title	Credits
Program Requirements		
FASHI 1531	Business of Fashion	3
FASHI 1430	Fashion Styling I	3
FASHI 1460	Visual Merchandising I	3
FASHI 2445	Brand Strategy for Fashion	3
FASHI 2440	Fashion Trends and Forecasting	3
FASHI 2455	Future of Fashion Retail	3
Program Electives		

Select 15 additional credits from Fashion Studies, Business, Management or Marketing Curriculum.

15

Total Credits

33

Fire Science

Area of Study

For more information about Fire Science, please visit the program page (<http://www.cod.edu/fire/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Emergency Medical Services, A.A.S. (p. 99)
- Emergency Medical Technician, Certificate (p. 100)
- Fire Fighter, Certificate (p. 100)
- Fire Science Technology, A.A.S. (p. 100)
- Paramedic, Certificate (p. 101)
- Public Safety Telecommunicator, Certificate (<https://catalog.cod.edu/programs-study/fire-science/public-safety-telecommunicator-certificate/>)

Emergency Medical Services, A.A.S.

The **Emergency Medical Services degree** includes theory and techniques of firefighting, inclusive of the Emergency Medical Technician curriculum, required by most fire departments. The program focuses on emergency medical services and the administration of those services in any setting. After completion of the degree and all of the objectives of the Illinois Department of Public Health are passed, the student is allowed to take the State of Illinois Paramedic Licensing exam.

For more information about Fire Science, please visit the program page (<http://www.cod.edu/fire/>).

Degree Requirements

Field of Study Code: FIRE.AAS.EMS

Code	Title	Credits
Program Requirements		
ANAT 1500	Survey of Human Anatomy and Physiology	4
ENGL 1101	English Composition I	3
HLTH 1110	Biomedical Terminology	3
SPEEC 1100	Fundamentals of Speech Communication	3
FIRE 2278	Paramedic I	12
FIRE 2279	Paramedic II	12
FIRE 2280	Paramedic III	12
General Education		
Three credits any Social/Behavioral Science Course (1100 or higher)		3
Three to five credits in a Mathematics course (1100 or higher) ¹		3-5
Three credits in a Humanities/Fine Arts course (1100 or higher)		3

Program Electives

Select six credit hours from the following 2000-level Fire Science courses: 6

FIRE 2272	Paramedic Transition
FIRE 2285	Trauma Assessment
FIRE 2286	Pediatric Education for Prehospital Professionals
FIRE 2287	Differential Medical Assessment

Total Credits 64-66

¹ Except for MATH 1104 Mathematics for Horticulture or MATH 1120 Mathematical Foundations for Diagnostic Medical Imaging Sonographers.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Emergency Medical Technician, Certificate

The **Emergency Medical Technician certificate** is designed for students and professionals who have an interest or are currently employed in the field of fire science or the emergency medical field. Introduction to the study of pre-hospital care as it relates to patient assessment, treatments and transportation to the hospital. After successful completion of the certificate and all of the objectives of the Illinois Department of Public Health (IDPH) are passed, the student is allowed to take the State of Illinois IDPH State Licensing exam or the National Registry of Emergency Medical Technician Certification exam. This certificate requires a grade of B or better and 10 credits in FIRE 2271 Emergency Medical Technician (EMT).

For more information about Fire Science, please visit the program page (<http://www.cod.edu/fire/>).

Certificate Requirements

Field of Study Code: FIRE.CER.EMT

Code	Title	Credits
FIRE 2271	Emergency Medical Technician (EMT)	10
Total Credits		10

Fire Fighter, Certificate

The Fire Fighter Certificate is designed for students in the fire service and professionals in similar fields who have an interest or are currently employed in the field of fire science. Basic operations firefighter, building construction, and extinguishing and alarm systems are essential in today's fire service. After completion of the certificate, state certifications will be awarded through the Office of the State Fire Marshal (OSFM), if state requirements are met and state Certification Exams are passed. This certificate requires 24 credits in the courses listed below.

For more information about Fire Science, please visit the program page (<http://www.cod.edu/fire/>).

Certificate Requirements

Field of Study Code: FIRE.CER

Code	Title	Credits
FIRE 1101	Basic Operations Firefighter- Mod A	6
FIRE 1102	Basic Operations Firefighter-B	6
FIRE 1103	Basic Operations Firefighter-C	6
FIRE 2201	Extinguishing and Alarm Systems	3
FIRE 2215	Building Construction	3
Total Credits		24

Fire Science Technology, A.A.S.

The **Fire Science Technology program** encompasses both fire fighting and emergency medical services. The Fire Science degree focuses on the theory and techniques of fire fighting, inclusive of the Emergency Medical Technician curriculum, required by most fire departments. After completion of the degree, state certifications may be awarded through the Office of the State Fire Marshal (OSFM) if the state requirements are met.

For more information about Fire Science, please visit the program page (<http://www.cod.edu/fire/>).

Degree Requirements

Field of Study Code: FIRE.AAS

Code	Title	Credits
Program Requirements		
ENGL 1101	English Composition I	3
or ENGL 1105	Workplace Writing	
<i>Select 6 of the following 7 courses:</i>		18
FIRE 1100	Introduction to Emergency Services	
FIRE 1112	Principles of Fire Prevention	
FIRE 2201	Extinguishing and Alarm Systems	
FIRE 2210	Fire Apparatus	
FIRE 2213	Principles/Fire Behavior and Combustion	
FIRE 2215	Building Construction	
FIRE 2218	Principles of Fire and Emergency Services Safety and Survival	

Program Electives

Select 15 credits from any 1000 or 2000-level Fire Science courses (p. 101) ¹ 15

Electives

Select 9 credits from any 1000- or 2000- level courses ¹ 9

General Education**Oral Communication**

Select one of the following: 3

SPEEC 1100	Fundamentals of Speech Communication
SPEEC 1120	Small-Group Communication
SPEEC 1150	Introduction to Business Communication

Physical and Life Sciences

Select at least one course with a laboratory component 3-5

Mathematics

Select three to five credits 1000 level or above 3-5

Humanities and Fine Arts

Select three credits	3

Social and Behavioral Sciences

Select three credits.	3

From the General Education or Elective classes, at least 2 credits must come from Global/Multicultural Studies or Contemporary Life Skills

Total Credits	60-64

¹ In addition to the courses listed above.

² At least two credits must come from the list of courses in the Global/Multicultural Studies or Contemporary Life Skills category.

Fire Science Electives

Code	Title	Credits
FIRE 1101	Basic Operations Firefighter- Mod A	6
FIRE 1102	Basic Operations Firefighter-B	6
FIRE 1103	Basic Operations Firefighter-C	6
FIRE 1104	Advanced Technician Firefighter	4
FIRE 1111	Fire Prevention I	3
FIRE 1120	Codes and Laws	3
FIRE 1183	Emergency Medical Responder	5
FIRE 2211	Fire Apparatus Engineer	3
FIRE 2221	Tactics I	3
FIRE 2222	Tactics II	3
FIRE 2231	Hazardous Materials Operations	3
FIRE 2234	Hazardous Materials Technician	6
FIRE 2250	Incident Safety Officer	3
FIRE 2251	Fire Leadership I	3
FIRE 2252	Fire Leadership II	3
FIRE 2253	Fire Leadership III	3
FIRE 2254	Fire Leadership IV	3
FIRE 2255	Fire Service Instructor I	3
FIRE 2256	Fire Service Instructor II	3
FIRE 2257	Company Fire Officer Phase I	3
FIRE 2258	Company Fire Officer Phase II	3
FIRE 2260	Fire Investigation	3
FIRE 2261	Fire/Arson Investigation I	3
FIRE 2262	Fire/Arson Investigation II	3
FIRE 2263	Fire/Arson Investigation III	3
FIRE 2264	Advanced Fire Officer Phase I	3
FIRE 2265	Advanced Fire Officer Phase II	5
FIRE 2267	Fire Service Vehicle Operator	1
FIRE 2271	Emergency Medical Technician (EMT)	10
FIRE 2272	Paramedic Transition	3
FIRE 2273	Vehicle and Machinery Operations	3
FIRE 2282	EMT Instructor Training	3
FIRE 2285	Trauma Assessment	3
FIRE 2286	Pediatric Education for Prehospital Professionals	3
FIRE 2287	Differential Medical Assessment	3
FIRE 2861	Fire Service Internship I	

FIRE 2862	Fire Service Internship II

FIRE 2863	Fire Service Internship III

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Paramedic, Certificate

After successful completion of the **Paramedic certificate** and all of the objectives of the Illinois Department of Public Health are passed, the student is allowed to take the State of Illinois Paramedic Licensing exam.

For more information about Fire Science, please visit the program page (<http://www.cod.edu/fire/>).

Certificate Requirements

Field of Study Code: FIRE.CER.MEDIC

Code	Title	Credits
FIRE 2278	Paramedic I	12
FIRE 2279	Paramedic II	12
FIRE 2280	Paramedic III	12
Total Credits		36

Geography**Area of Study**

For more information about Geography, please visit the program page (<http://www.cod.edu/geography/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Geographic Information Systems, Certificate (p. 101)
- Geography Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/geography/geography-transfer-pathway-aa/>)

Geographic Information Systems, Certificate

The Geographic Information Systems (GIS) Certificate is intended to provide formal GIS training to students interested in this field. The five technical classes cover a broad range of GIS topics including terminology, data management, map design, geodatabases, spatial queries, spatial analysis, project development and design and problem solving. The program emphasizes a real world approach to the GIS sciences with the purpose of attaining employment and careers in the field of GIS. A sixth topical course provides a context for application of these GIS skills. This certificate requires 18 credits.

For more information about Geography, please visit the program page (<http://www.cod.edu/geography/>).

Certificate Requirements

Field of Study Code: GEOGR.CER.GIS

Code	Title	Credits
Program Requirements		
GEOGR 1151	Geographic Information Systems I	3
GEOGR 1152	Geographic Information Systems II	3
GEOGR 1153	Applied Geographic Information Systems	3
GEOGR 1154	Geodatabase Development	3
GEOGR 1155	GIS Capstone Project	3
Program Electives		3
Select one of the following:		
ANTHR 1200	Discovering Archaeology	
CRIMJ 1112	Crime Prevention	
CRIMJ 1145	Introduction to Homeland Security	
EARTH 1119	Weather Impacts and Preparedness	
GEOGR 1140	Urban Geography	
MANAG 2170	Project Management	
MANAG 2210	Principles of Management	
Total Credits		18

Graphic Design

Area of Study

For more information about Graphic Design, please visit the program page (<http://www.cod.edu/graphic-design/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Graphic Design Foundation, Certificate (p. 102)
- Graphic Design, A.A.S. (p. 102)
- Interactive Media, A.A.S. (p. 103)
- Web Design, Certificate (p. 103)

Graphic Design Foundation, Certificate

The **Graphic Design Foundation certificate** provides a foundation in the principles and elements of design, typography, drawing, and illustration, using traditional and digital design tools and software. This certificate requires 27 credits in the courses listed below.

For more information about Graphic Design, please visit the program page (<http://www.cod.edu/graphic-design/>).

Certificate Requirements

Field of Study Code: GRDSN.CER.FOUND

Code	Title	Credits
GRDSN 1100	Drawing for Design	3
GRDSN 1101	Digital Graphic Applications	3

GRDSN 1102	Graphic Design 1	3
GRDSN 1104	Typography	3
GRDSN 1105	Graphic Design 2	3
GRDSN 1106	Three-Dimensional Design	3
GRDSN 1107	Digital Illustration 1	3
GRDSN 1108	Digital Illustration Design 2	3
GRDSN 2200	User Experience Design	3
Total Credits		27

Graphic Design, A.A.S.

The Graphic Design program emphasizes portfolio development through the study of principles and elements of design, typography, illustration, identity design, advertising design, web design and simulated studio work. Students gain experience in the use of traditional and digital design tools and software. Articulation agreements exist to continue education beyond the AAS degree. The **Graphic Design degree** consists of a minimum of 66 credits in program requirements and general education in the courses listed below.

For more information about Graphic Design, please visit the program page (<http://www.cod.edu/graphic-design/>).

Degree Requirements

Field of Study Code: GRDSN.AAS

Code	Title	Credits
Program Requirements		
GRDSN 1100	Drawing for Design	3
GRDSN 1101	Digital Graphic Applications	3
GRDSN 1102	Graphic Design 1	3
GRDSN 1104	Typography	3
GRDSN 1105	Graphic Design 2	3
GRDSN 1106	Three-Dimensional Design	3
GRDSN 1107	Digital Illustration 1	3
GRDSN 1108	Digital Illustration Design 2	3
GRDSN 2200	User Experience Design	3
GRDSN 2201	Graphic Design 3	3
GRDSN 2202	Web/Interactive Design 1	3
GRDSN 2203	Advertising Design	3
GRDSN 2204	Digital Illustration 3	3
GRDSN 2205	Graphic Design 4	3
GRDSN 2206	Web/Interactive Design 2	3
GRDSN 2208	Portfolio Seminar	3
General Education		
Select 18 to 22 credits, including one of the following courses: ¹		18-22
ART 2211	Art Histories Before 1400 CE	
ART 2212	Art Histories 1400 to 1950	
ART 2213	Art Histories Since 1950	
ART 2214	Non-Western Art	
Total Credits		66-70

¹ In addition to the courses listed above.

² NASAD accreditation requires a three credit Art History course to fulfill the Humanities & Fine Arts general education requirement.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Interactive Media, A.A.S.

The **Interactive Media degree** provides students with interdisciplinary, theoretical, and application knowledge in the design, development, and production of interactive media, including web-based and other emerging media, to create interactive design solutions for a variety media such as web sites, digital interfaces, and applications. This degree program consists of a minimum of 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Graphic Design, please visit the program page (<http://www.cod.edu/graphic-design/>).

Degree Requirements

Field of Study Code: GRDSN.AAS.MEDIA

Code	Title	Credits
Program Requirements		
GRDSN 1100	Drawing for Design	3
GRDSN 1101	Digital Graphic Applications	3
GRDSN 1102	Graphic Design 1	3
GRDSN 1104	Typography	3
GRDSN 1105	Graphic Design 2	3
GRDSN 2200	User Experience Design	3
GRDSN 2201	Graphic Design 3	3
GRDSN 2202	Web/Interactive Design 1	3
GRDSN 2206	Web/Interactive Design 2	3
CIS 1120	The Internet	2
CIS 1310	HTML and CSS	3
CIS 1400	Programming Logic and Technique	4
CIS 2320	JavaScript Programming	
Program Electives		
Select two of the following:		6
CIS 1300	Web Design Software	
CIS 1510	Graphical User Interface Programming	
CIS 2330	Introduction to XML	
CIS 2510	Adv Graphical User Interface Programming	
MPTV 1011	Introduction to Motion Picture and Television	
MPTV 1020	Editing for Motion Pictures and Television	
MPTV 1324	Motion Graphics and Special Effects I	
MPTV 2331	3-D Animation I	
MPTV 2333	Motion Graphics and Special Effects II	
General Education		
Select 19 to 22 credits. ^{1, 2}		19-22
Total Credits		61-64

¹ In addition to the courses listed above.

² NASAD accreditation requires a three credit Art History course to fulfill the Humanities & Fine Arts general education requirement. It is strongly recommended that students choose one of the following courses: ART 2211 Art Histories Before 1400 CE, ART 2212 Art Histories 1400 to 1950, ART 2213 Art Histories Since 1950, ART 2214 Non-Western Art.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Web Design, Certificate

The **Web Design certificate** provides a foundation in design, principles of interactivity, and the use of web-authoring software. This certificate requires 24 credits in the courses listed below.

For more information about Graphic Design, please visit the program page (<http://www.cod.edu/graphic-design/>).

Certificate Requirements

Field of Study Code: GRDSN.CER.WEBDE

Code	Title	Credits
GRDSN 1102	Graphic Design 1	3
GRDSN 1104	Typography	3
GRDSN 1105	Graphic Design 2	3
GRDSN 1107	Digital Illustration 1	3
GRDSN 2200	User Experience Design	3
GRDSN 2201	Graphic Design 3	3
GRDSN 2202	Web/Interactive Design 1	3
GRDSN 2206	Web/Interactive Design 2	3
Total Credits		24

Health Information Technology

Area of Study

For more information about Health Information Technology, please visit the program page (<http://www.cod.edu/hit/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Health Information Technology, A.A.S. (p. 103)
- Medical Billing, Certificate (<https://catalog.cod.edu/programs-study/health-information-technology/medical-billing-certificate/>)
- Physician Coding, Certificate (<https://catalog.cod.edu/programs-study/health-information-technology/physician-coding-certificate/>)

Health Information Technology, A.A.S.

The Health Information Technology program is an Associate in Applied Science (AAS) degree accredited by Commission Accreditation for Health Informatics and Information and Informatics Management

(CAHIIM). Health Information professionals are integral to the success of health care organizations as they are the link between clinicians, administrators, insurance companies and patients. The field is generally considered to be the business side of health care and is an essential part of quality health care.

While not involved directly with patient care, Health Information professionals care for patients by keeping their health records accurate, accessible, protected and complete. They are the hub from which health data is compiled, managed and disseminated for patient care, reimbursement, compliance and research. Health Information professionals are found in a variety of health care settings including hospitals, surgical centers, home health, rehabilitation and skilled nursing facilities and many have the opportunity to work remotely.

Upon successful completion of the program, students are eligible to take the Registered Health Information Technology (RHIT) national credentialing exam offered by the American Health Information Management Association (AHIMA). This degree prepares students for other industry credentials including the Certified Coding Specialist-Physician-based (CCS-P) and the Certified Professional Coder (CPC) awarded by the APCC. The **Health Information Technology degree** requires 64 credits in program requirements along with general education requirements. Students must complete all courses in this program with a grade of C or higher.

For more information about Health Information Technology, please visit the program of study page (<http://www.cod.edu/hit/>).

This degree requires program application and admission; please visit the above link for details.

Degree Requirements

Field of Study Code: HIT.AAS

Code	Title	Credits
General Education Requirements		
ANAT 1500	Survey of Human Anatomy and Physiology ²	4-8
or ANAT 1551 & ANAT 1552 or ANAT 1571 & ANAT 1572	Human Anatomy and Physiology I and Human Anatomy and Physiology II Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	
CIS 1150	Understand Computers/Information/Systems ²	3
ENGLI 1105 or ENGLI 1101	Workplace Writing ^{1 2} English Composition I	3
HUMNT 1102	Introduction to Humanities: Ideas and Values ³	3
PSYCH 1100	General Psychology	3
SPEEC 1100	Fundamentals of Speech Communication	3
Program Required Courses		
HLTHS 1110	Biomedical Terminology ²	3
HIT 1130	Survey of Health Information Management	4
HIT 1107	CPT Coding	3
PSYCH 2280 or SOCIO 2205	Statistics/Social & Behavioral Sciences Statistics for the Social and Behavioral Sciences	3
HIT 1140	Disease and Pharmacology for Health Information Technology	4

HIT 1110	Diagnostic Coding	3
HIT 1210	Health Information Statistics and Analysis	3
HIT 2110	Health Information Law and Compliance	4
HIT 1109	Inpatient Procedural Coding	3
CIS 1221	Data Analysis with Spreadsheets	3
HIT 1217	Revenue Cycle Management	4
HIT 2208	Advanced Medical Coding	3
HIT 2240	Health Information Organizational Management and Leadership	3
HIT 2250	Health Information Technology Capstone	2
Total Credits		64-68

- ¹ Previous credit for ENGLI 1101 English Composition I will be accepted, students new to program should take ENGLI 1105 Workplace Writing.
² Program requisite
³ HUMNT 1102 Introduction to Humanities: Ideas and Values is recommended, but students can take any Humanities course that meets the AAS general education requirement.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Health Sciences

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Non-Invasive Electrocardiography Technician, Certificate (p. 104)
- Pharmacy Technician, Certificate (p. 105)
- Phlebotomy, Certificate (p. 105)

Non-Invasive Electrocardiography Technician, Certificate

The **Non-Invasive Electrocardiography Technician certificate** program prepares students to work in cardiology performing non-invasive cardiographic tests, including EKGs, Holter monitors and treadmill stress testing. Upon successful completion of the program, students are eligible to take the Certified Cardiographic Technician (CCT) exam through Cardiovascular Credentialing International (CCI). This certificate requires 9 credits in the courses listed below.

Certificate Requirements

Field of Study Code: HLTHS.CER.NEKG

Code	Title	Credits
HLTHS 1110	Biomedical Terminology	3
HLTHS 1126	Basic Non-Invasive Electrocardiography	2
HLTHS 1128	Advanced Non-Invasive Electrocardiography (ekg)	3

HLTHS 1129	Non-Invasive Electrocardiography Clinical	1
Total Credits		9

Pharmacy Technician, Certificate

The **Pharmacy Technician certificate** program includes pharmacy abbreviation, calculations, drug classes, basic physiology, disease states and prescription processing. Students also receive hands-on compounding experience and instruction for preparation of the Pharmacy Technician Certification Board (PTCB) national exam. This certificate requires five credits in the course listed below.

Certificate Requirements

Field of Study Code: HLTHS.CER.PHARM

Code	Title	Credits
HLTHS 1115	Pharmacy Technician	5
Total Credits		5

Phlebotomy, Certificate

Phlebotomists are health care professionals that collect blood specimens for laboratory testing. Laboratory testing is an important tool physicians use to evaluate, diagnose, and monitor treatment for patients. Phlebotomists are employed in a variety of patient-care settings, including clinical laboratories, reference laboratories, clinics, and physician offices, insurance companies. The Phlebotomy program meets the Clinical Laboratory Standards Institute (CLSI) standards. Upon successful completion of this certificate, students are eligible to apply for the Phlebotomy Technician exam (PBT) through the American Society for Clinical Pathology (ASCP) to become a Certified Phlebotomist. The **Phlebotomy certificate** requires 11 credits in the courses listed below.

Certificate Requirements

Field of Study Code: HLTHS.CER.PHLEBT

Code	Title	Credits
HLTHS 1110	Biomedical Terminology	3
HLTHS 1122	Basic Phlebotomy Techniques	4
HLTHS 1124	Phlebotomy Clinical	2
HLTHS 1126	Basic Non-Invasive Electrocardiography	2
Total Credits		11

Hearing Instrument Dispensary

Area of Study

For more information about Hearing Instrument Dispensary, please visit the program page (http://www.cod.edu/hearing_instrument/).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Hearing Instrument Dispensary Program, Certificate (p. 105)

Hearing Instrument Dispensary Program, Certificate

The **Hearing Instrument Dispensary Program certificate** prepares students for entry level position as a hearing health care provider. Graduates of this certificate program are eligible to take their written and practical Illinois Department of Public Health Licensure exam. This certificate requires 22 credits in the courses listed below.

For more information about Hearing Instrument Dispensary, please visit the program page (http://www.cod.edu/hearing_instrument/).

Certificate Requirements

Field of Study Code: HIDP.CER

Code	Title	Credits
HIDP 1101	The Auditory Mechanism	3
HIDP 1102	Acoustics and Hearing Science	3
HIDP 1103	Intro to Audiology & Clinical Audiometry	4
HIDP 1104	Aural Rehabilitation Across the Lifespan	3
HIDP 2101	Hearing Aids	4
HIDP 2102	Professional Issues and the Hearing Instrument Specialist	3
HIDP 2112	Clinical Practicum	2
Total Credits		22

Heating, Ventilation, Air Conditioning and Refrigeration

Area of Study

For more information about Heating, Ventilation, Air Conditioning and Refrigeration, please visit the program page (<http://www.cod.edu/hvacr/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Building Automation Systems (BAS), Certificate (p. 106)
- Energy Audit and Analysis, Certificate (p. 106)
- Entry Level HVACR, Certificate (<https://catalog.cod.edu/programs-study/heating-ventilation-air-conditioning-refrigeration/entry-level-hvacr-certificate/>)
- Facility Maintenance Mechanic, A.A.S. (p. 106)
- Heating, Air Conditioning and Refrigeration Service Technician, A.A.S. (p. 107)
- HVACR Contractor, A.A.S. (p. 107)
- Service Technician, Certificate (p. 108)
- Stationary Operator, Certificate (p. 108)

Building Automation Systems (BAS), Certificate

The **Building Automation Systems (BAS) certificate** prepares a student for an entry level building or energy controls technician position. This certificate requires 37 credits in the courses listed below.

For more information about Heating, Ventilation, Air Conditioning & Refrigeration, please visit the program page (<http://www.cod.edu/hvacr/>).

Certificate Requirements

Field of Study Code: HVACR.CER.SYSTM

Code	Title	Credits
HVACR 1100	Refrigeration Principles	3
HVACR 1105	Introduction to Safety, Materials and Equipment	3
HVACR 1108	Refrigerant Certification	1
HVACR 1110	Introduction to Electricity and Hvacr Controls	3
HVACR 1181	Heating Principles	3
HVACR 2202	Commercial Air Conditioning	3
HVACR 2230	HVACR Control Systems	3
HVACR 2231	Building Automation Control Devices	3
HVACR 2233	Bldg Automation Systems With Object-Oriented Programming I	3
HVACR 2234	Bldg Automation Systems With Object-Oriented Programming II	3
HVACR 2235	Building Commissioning	3
HVACR 2237	Building Automation Systems Solutions	3
HVACR 2238	Building Automation System Integration with Open Protocols	3
Total Credits		37

Energy Audit and Analysis, Certificate

The **Energy Audit and Analysis certificate** is designed for Heating, Ventilation & Air Conditioning (HVAC) and building inspection contractors to expand their services to include residential and light commercial energy audits and additional services. This certificate requires 10 credits in the courses listed below.

For more information about Heating, Ventilation, Air Conditioning & Refrigeration, please visit the program page (<http://www.cod.edu/hvacr/>).

Certificate Requirements

Field of Study Code: HVACR.CER.ENERG

Code	Title	Credits
HVACR 2232	Energy Audits/Economics	2
HVACR 2240	Load Calculations and Duct Design	5
HVACR 2260	Heating and Air Conditioning Contracting	3
Total Credits		10

Facility Maintenance Mechanic, A.A.S.

The **Facility Maintenance Mechanic degree** is designed for the individual seeking a career in Facility Maintenance. The degree prepares students for commercial and industrial facility maintenance employment. There are emphases in both commercial and industrial HVACR to allow students to create their own career pathways. This degree requires a minimum of 64 credits in program requirements, electives and general education in the courses listed below.

For more information about Heating, Ventilation, Air Conditioning & Refrigeration, please visit the program page (<http://www.cod.edu/hvacr/>).

Degree Requirements

Field of Study Code: HVACR.AAS.MAINT

Code	Title	Credits
Program Requirements		
HVACR 1100	Refrigeration Principles	3
HVACR 1105	Introduction to Safety, Materials and Equipment	3
HVACR 1108	Refrigerant Certification	1
HVACR 1110	Introduction to Electricity and Hvacr Controls	3
HVACR 1181	Heating Principles	3
HVACR 2110	Facility Electrical Systems	3
HVACR 2186	Hydronic Heating	3
HVACR 2187	Central Heating Plants	3
HVACR 2202	Commercial Air Conditioning	3
HVACR 2236	Central Cooling Plants	3
HVACR 2242	Mechanical Systems	3
Program Electives		
select at least 15 credits from hvacr courses or the other courses as specified under the emphasis courses options/ (https://catalog.cod.edu/programs-study/heating-ventilation-air-conditioning-refrigeration/emphases/) ^{1, 2}		15
General Education		
Select 18 to 22 credits ²		18-22
Total Credits		64-68

¹ Students may also choose to focus elective coursework by focusing on Commercial or Industrial Maintenance by taking emphasis courses.

² Students may also choose general electives in any HVACR courses.

² In addition to the courses listed above.

Emphases Courses

Commercial Facility Maintenance

Code	Title	Credits
HVACR 2210	Commercial Refrigeration	5
HVACR 2230	HVACR Control Systems	3
HVACR 2231	Building Automation Control Devices	3
HVACR 2250	System Balancing	3

Industrial Maintenance

Code	Title	Credits
HVACR 2241	Industrial Air Conditioning Design	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
MANUF 1151	Machine Shop I	3
WELD 1100	Welding I	3

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Heating, Air Conditioning and Refrigeration Service Technician, A.A.S.

The **Heating, Air Conditioning and Refrigeration Service Technician degree** offers training in current technology for diagnosing, servicing, repairing, installing and maintaining heating, air conditioning, refrigeration and energy systems. There are emphases in both residential and commercial HVACR to allow students to create their own career pathways. This degree requires a minimum of 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Heating, Ventilation, Air Conditioning & Refrigeration, please visit the program page (<http://www.cod.edu/hvacr/>).

Degree Requirements

Field of Study Code: HVACR.AAS.HVAC

Code	Title	Credits
Program Requirements		
HVACR 1100	Refrigeration Principles	3
HVACR 1105	Introduction to Safety, Materials and Equipment	3
HVACR 1108	Refrigerant Certification	1
HVACR 1110	Introduction to Electricity and Hvacr Controls	3
HVACR 1161	Introduction to Sheet Metal	2
HVACR 1181	Heating Principles	3
HVACR 2180	Residential and Light Commercial Forced-Air Heating	3
HVACR 2186	Hydronic Heating	3
HVACR 2201	Residential Air Conditioning	3
HVACR 2202	Commercial Air Conditioning	3
HVACR 2220	Installation	3
HVACR 2225	Troubleshooting Systems	3
Program Electives		
select at least 13 credits from hvacr course(s)/ (https://catalog.cod.edu/programs-study/heating-ventilation-air-conditioning-refrigeration/emphases/) ^{1,2}		13
General Education		
Select 18 to 22 credits ²		18-22
Total Credits		64-68

- ¹ Students may choose to focus elective coursework by focusing on Residential or Commercial Service by taking emphasis courses.
² Students may also choose general electives in any HVACR courses.
² In addition to the courses listed above.

Emphases Courses**Residential Service**

Code	Title	Credits
HVACR 2232	Energy Audits/Economics	2
HVACR 2240	Load Calculations and Duct Design	5
HVACR 2260	Heating and Air Conditioning Contracting	3

Commercial Service

Code	Title	Credits
HVACR 2210	Commercial Refrigeration	5
HVACR 2236	Central Cooling Plants	3
HVACR 2250	System Balancing	3

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

HVACR Contractor, A.A.S.

The **HVACR Contractor degree** is intended to provide the technical and business skills required to be successful as an HVACR Contractor. This degree requires 64 credits in program requirements and general education in the courses listed below.

For more information about Heating, Ventilation, Air Conditioning & Refrigeration, please visit the program page (<http://www.cod.edu/hvacr/>).

Degree Requirements

Field of Study Code: HVACR.AAS.CONTRA

Code	Title	Credits
Program Requirements		
HVACR 1100	Refrigeration Principles	3
HVACR 1105	Introduction to Safety, Materials and Equipment	3
HVACR 1108	Refrigerant Certification	1
HVACR 1110	Introduction to Electricity and Hvacr Controls	3
HVACR 1161	Introduction to Sheet Metal	2
HVACR 1181	Heating Principles	3
HVACR 2180	Residential and Light Commercial Forced-Air Heating	3
HVACR 2201	Residential Air Conditioning	3
HVACR 2202	Commercial Air Conditioning	3
HVACR 2210	Commercial Refrigeration	5
HVACR 2220	Installation	3
HVACR 2225	Troubleshooting Systems	3
HVACR 2240	Load Calculations and Duct Design	5
HVACR 2260	Heating and Air Conditioning Contracting	3
MANAG 2210	Principles of Management	3

General Education

Select 18 to 22 credits ¹	18-22
Total Credits	64-68

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Service Technician, Certificate

The **Service Technician certificate** prepares students for entry-level positions in the HVACR industry. This certificate requires 33 credits in the courses listed below.

For more information about Heating, Ventilation, Air Conditioning & Refrigeration, please visit the program page (<http://www.cod.edu/hvacr/>).

Certificate Requirements

Field of Study Code: HVACR.CER.HVAC

Code	Title	Credits
HVACR 1100	Refrigeration Principles	3
HVACR 1105	Introduction to Safety, Materials and Equipment	3
HVACR 1108	Refrigerant Certification	1
HVACR 1110	Introduction to Electricity and Hvacr Controls	3
HVACR 1161	Introduction to Sheet Metal	2
HVACR 1181	Heating Principles	3
HVACR 2180	Residential and Light Commercial Forced-Air Heating	3
HVACR 2186	Hydronic Heating	3
HVACR 2201	Residential Air Conditioning	3
HVACR 2202	Commercial Air Conditioning	3
HVACR 2220	Installation	3
HVACR 2225	Troubleshooting Systems	3
Total Credits		33

Stationary Operator, Certificate

The **Stationary Operator certificate** is designed for the individual seeking a career in Facility Maintenance. The certificate prepares students for commercial and industrial Facility Maintenance. This certificate requires 31 credits in the courses listed below.

For more information about Heating, Ventilation, Air Conditioning & Refrigeration, please visit the program page (<http://www.cod.edu/hvacr/>).

Certificate Requirements

Field of Study Code: HVACR.CER.STATOP

Code	Title	Credits
HVACR 1100	Refrigeration Principles	3
HVACR 1105	Introduction to Safety, Materials and Equipment	3

HVACR 1108	Refrigerant Certification	1
HVACR 1110	Introduction to Electricity and Hvacr Controls	3
HVACR 1181	Heating Principles	3
HVACR 2110	Facility Electrical Systems	3
HVACR 2186	Hydronic Heating	3
HVACR 2187	Central Heating Plants	3
HVACR 2202	Commercial Air Conditioning	3
HVACR 2236	Central Cooling Plants	3
HVACR 2242	Mechanical Systems	3
Total Credits		31

Horticulture

Area of Study

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Advanced Horticultural Therapy, Certificate (<https://catalog.cod.edu/programs-study/horticulture/advanced-horticultural-therapy-certificate/>)
- Cannabis and Industrial Hemp Cultivation and Operations, Certificate (<https://catalog.cod.edu/programs-study/horticulture/cannabis-and-industrial-hemp-cultivation-and-operations-certificate/>)
- Floral Shop Management, Certificate (p. 108)
- Greenhouse Management, Certificate (p. 109)
- Horticultural Therapy, Certificate (<https://catalog.cod.edu/programs-study/horticulture/horticultural-therapy-certificate/>)
- Horticulture, A.A.S. (p. 109)
- Horticulture, Certificate (p. 111)
- Landscape and Turf Maintenance, Certificate (p. 111)
- Landscape Contracting and Management, A.A.S. (p. 111)
- Landscape Design and Construction, Certificate (p. 112)
- Nursery and Garden Center Management, Certificate (p. 112)
- Power Equipment and Technology, Certificate (p. 113)
- Sustainable Landscapes, Certificate (p. 113)
- Sustainable Urban Agriculture, A.A.S. (p. 113)
- Sustainable Urban Agriculture, Certificate (p. 114)
- Urban Farming, Certificate (<https://catalog.cod.edu/programs-study/horticulture/urban-farming-certificate/>)

Floral Shop Management, Certificate

The **Floral Shop Management certificate** prepares students for an entry level position as a floral designer or floral shop manager.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER.FLOR

Code	Title	Credits
Program Requirements		
HORT 1100	Introduction to Horticulture	3
HORT 1105	Floral Design I	3
HORT 1115	Floral Design II	3
HORT 1130	Horticulture Business	3
or BUSIN 1100	Introduction to Business	
HORT 2225	Specialty Floral Design	3
HORT 2226	Advanced Specialty Floral Design	1
HORT 2244	Herbaceous Perennials	3
HORT 2863	Internship (Career & Technical Ed)	3
Program Electives		
Select at least three credits from any 1000 or 2000 level HORT or listed course options ¹		3
Total Credits		25

² The following courses are suggested:

- FASHI 1620 Visual Merchandising I
- MARKE 1150 Social Media Marketing

Greenhouse Management, Certificate

The Greenhouse Management certificate program provides students with core competencies required to effectively manage a greenhouse. Certificate allows for a selection of topics including: greenhouse crop production, bedding plant production, greenhouse operations and procedures, horticulture, horticulture business, plant propagation, and soils and fertilizers. Students are required to complete an internship to earn the certificate.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER.GRNH

Code	Title	Credits
Program Required Courses		
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1130	Horticulture Business	3
or BUSIN 1100	Introduction to Business	
HORT 2221	Plant Propagation	3
HORT 2222	Introduction to Plant Breeding	3
or HORT 2304	Hydroponic and Aquaponic Production Systems	
HORT 2253	Greenhouse Operations and Procedures	3
HORT 2255	Greenhouse Crop Production	3
HORT 2257	Bedding Plant Production	3

HORT 2863	Internship (Career & Technical Ed)	3
Total Credits		27

Horticulture, A.A.S.

The Horticulture program meets the needs of students entering the horticulture industry as well as those presently employed who wish to continue their professional growth. Besides providing horticultural knowledge and skills, the program emphasizes the business and management proficiency necessary to compete successfully in the horticulture industry.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Degree Requirements

Field of Study Code: HORT.AAS

Code	Title	Credits
Program Requirements		
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1110	Applied Plant Taxonomy	3
HORT 1130	Horticulture Business	3
or BUSIN 1100	Introduction to Business	
HORT 2221	Plant Propagation	3
HORT 2863	Internship (Career & Technical Ed)	3
Select one of the following:		4-5
BIOLO 1110	Environmental Biology	
BIOLO 1151	Principles of Biological Science	
CHEMI 1211	Survey of General Chemistry	
MATH 1104	Mathematics for Horticulture	3
Program Electives (p. 109)		
Select a minimum of 27 credit hours ¹		27
General Education		
Select 12 credits ²		12
Total Credits		64-65

¹ When selecting program electives, students may include up to eight credits in any combination from the additional courses listed below. No more than three credits of co-op can be applied as program elective credit toward this degree.

- ARCH 1211 Basic Computer-Aided Drafting-AutoCAD
- HORT 1800 Special Project
- HORT 2860 Internship (Career & Technical Ed)
- HORT 2865 Internship Advanced (Career & Tech Ed)

² In addition to the courses listed under program requirements.

Program Electives

Code	Title	Credits
HORT 1105	Floral Design I	3
HORT 1109	OSHA 10-Hour Landscape Safety	1
HORT 1111	Landscape Design I	3
HORT 1112	Landscape Maintenance	3

HORT 1113	Landscape Construction	3
HORT 1114	Irrigation & Water Management	3
HORT 1115	Floral Design II	3
HORT/SPANI 1116	Spanish for Horticulture	3
HORT 1120	Landscape Lighting	2
HORT 1121	National Collegiate Landscape Competitions	2
HORT 1125	Water Use/Conservation in the Landscape	1
HORT 1131	Landscaping for Wildlife	1
HORT 1135	Introduction to Green Roofs	1
HORT 1140	Landscape Graphics	2
HORT 1141	Sustainable Landscape Design	1
HORT 1142	Landscaping for Pollinators	1
HORT 1145	Perennial Plant Communities I	2
HORT 1148	Introduction to Horticultural Therapy	3
HORT/AUTO 1150	Power Equipment Electrical Systems	3
HORT/AUTO 1151	2-Cycle Small Engine Repair/Maintenance	2
HORT/AUTO 1152	4-Cycle Small Engine Repair/Maintenance	3
HORT 1185	Arboriculture	3
HORT 1420	Cannabis and Industrial Hemp Production	4
HORT 1820	Selected Topics	3
HORT 1821	Selected Topics	3
HORT 1824	Selected Topics	2
HORT 1826	Selected Topics	1
HORT 1827	Selected Topics	1
HORT 2211	Computer-Aided Drafting for Landscape	3
HORT 2213	3D Landscape Design	3
HORT 2222	Introduction to Plant Breeding	3
HORT 2225	Specialty Floral Design	3
HORT 2226	Advanced Specialty Floral Design	1
HORT 2231	Turf Science and Management	3
HORT 2235	Landscape Estimating and Bidding	3
HORT 2241	Landscape Plants I	3
HORT 2242	Landscape Plants II	3
HORT 2243	Ornamental Grasses	2
HORT 2244	Herbaceous Perennials	3
HORT 2245	Perennial Plant Communities II	1
HORT 2246	Perennial Plant Communities Stewardship	1
HORT 2251	Plant Pathology	3
HORT 2253	Greenhouse Operations and Procedures	3
HORT 2255	Greenhouse Crop Production	3
HORT 2256	Interior Plant Identification & Design	2
HORT 2257	Bedding Plant Production	3
HORT 2261	Entomology for Horticulture	3
HORT 2271	Landscape Design II	3
HORT 2301	Principles of Agroecology	3
HORT 2304	Hydroponic and Aquaponic Production Systems	3
HORT 2306	Introduction to Beekeeping	2
HORT 2308	Introduction to Composting	1
HORT 2311	Cool Season Vegetable and Herb Production	2

HORT 2312	Warm Season Vegetable and Herb Production	2
BUSIN 1180	Dispensary Operations	2
BUSLW 1180	Cannabis Law and Policy	1

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Suggested Semester Sequence

Course	Title	Credits
First Semester		
ENGLI 1101 or ENGLI 1105	English Composition I or Workplace Writing	3
HORT 1100	Introduction to Horticulture	3
HORT 1110	Applied Plant Taxonomy	3
HORT 1101	Soils and Fertilizers	3
BUSIN 1100 or HORT 1130	Introduction to Business or Horticulture Business	3
Credits		15
Second Semester		
Select one of the following:		3
SPEEC 1100	Fundamentals of Speech Communication	
SPEEC 1120	Small-Group Communication	
SPEEC 1150	Introduction to Business Communication	
MATH 1104	Mathematics for Horticulture	3
Electives	Program Electives (choose courses to total 6 hours)	6
Select one of the following:		4-5
BIOLO 1110	Environmental Biology	
BIOLO 1151	Principles of Biological Science	
CHEMI 1211	Survey of General Chemistry	
Credits		16-17
Summer Semester		
Electives	Program Electives (choose courses to total 6 hours)	6
Credits		6
Third Semester		
Gen Ed	Social and Behavioral Sciences (p. 26)	3
Electives	Program Electives (choose courses to total 9 hours)	9
Credits		12
Fourth Semester		
Gen Ed	Humanities and Fine Arts (Recommend HORT/SPANI 1116) (p. 25)	3
Electives	Program Electives (choose courses to total 6 hours)	6
HORT 2221	Plant Propagation	3
HORT 2863	Internship (Career & Technical Ed)	3
Credits		15
Total Credits		64-65

Program Milestones

First Semester

- Consider joining or visiting with a professional, cultural or interest-based Student Club (http://cod.edu/student_life/clubs_org/).
- Meet with horticulture program advisor
- Join horticulture club
- Participate in industry and community events
- Begin Horticulture Portfolio

Second Semester

- If you have not done so yet this semester, it is important to make an appointment with a Faculty or Program Advisor (<https://cod.edu/academics/programs/horticulture/contact.html>) to discuss your future academic progress.

Third Semester

- Start researching internship opportunities
- Participate in department community service and industry events
- Degree audit with program chair
- Meet with program advisor for support
- Develop/maintain portfolio

Fourth Semester

- Apply for graduation
- Participate in department community service and industry events
- Degree audit with advisor

Horticulture, Certificate

The **Horticulture certificate** program prepares students for entry level careers in the horticulture and greenhouse industry.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER

Code	Title	Credits
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1110	Applied Plant Taxonomy	3
HORT 1130	Horticulture Business	3
HORT 2221	Plant Propagation	3
HORT 2863	Internship (Career & Technical Ed)	3
Total Credits		18

Landscape and Turf Maintenance, Certificate

The **Landscape and Turf Maintenance certificate** requires 39 credits in the courses listed below.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER.TURF

Code	Title	Credits
Program Requirements		
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1112	Landscape Maintenance	3
HORT 1113	Landscape Construction	3
HORT 1114	Irrigation & Water Management	3
HORT 2231	Turf Science and Management	3
HORT 2251	Plant Pathology	3
HORT 2261	Entomology for Horticulture	3
HORT 2863	Internship (Career & Technical Ed)	3
MATH 1104	Mathematics for Horticulture	3
Program Electives		
Select six credits from the following: ¹		6
HORT 1110	Applied Plant Taxonomy	
HORT 1151	2-Cycle Small Engine Repair/Maintenance	
HORT 1152	4-Cycle Small Engine Repair/Maintenance	
HORT 1185	Arboriculture	
HORT 2241	Landscape Plants I	
HORT 2242	Landscape Plants II	
HORT 2244	Herbaceous Perennials	
Select three credits from the following: ¹		3
HORT 2241	Landscape Plants I	
HORT 2242	Landscape Plants II	
HORT 2244	Herbaceous Perennials	
Total Credits		39

¹ Courses cannot be repeated.

Landscape Contracting and Management, A.A.S.

The Landscape Contracting and Management Degree develops a student's ability to design, implement, and maintain landscape projects. Students build professional skills in plant healthcare, design, estimating, installation, and project management while earning an Associate's in Applied Science Degree. Landscape contracting graduates are well-placed to work in the growing field of sustainable landscaping, or enter a Bachelors program in Horticulture or related field. This degree is accredited through the National Association of Landscape Professionals (NALP).

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Degree Requirements

Field of Study Code: HORT.AAS.LAND

Code	Title	Credits
Program Requirements		
Select one of the following:		4-5

BIOLO 1110	Environmental Biology	
BIOLO 1151	Principles of Biological Science	
CHEMI 1211	Survey of General Chemistry	
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1109	OSHA 10-Hour Landscape Safety	1
HORT 1111	Landscape Design I	3
HORT 1112	Landscape Maintenance	3
HORT 1113	Landscape Construction	3
HORT 1114	Irrigation & Water Management	3
HORT 1130	Horticulture Business	3
HORT 2211	Computer-Aided Drafting for Landscape	3
HORT 2213	3D Landscape Design	3
HORT 2231	Turf Science and Management	3
HORT 2235	Landscape Estimating and Bidding	3
HORT 2241	Landscape Plants I	3
HORT 2242	Landscape Plants II	3
HORT 2251	Plant Pathology	3
HORT 2261	Entomology for Horticulture	3
HORT 2863	Internship (Career & Technical Ed)	3
ECONO 2201	Principles of Macroeconomics	3
or ECONO 2202	Principles of Microeconomics	
MATH 1104	Mathematics for Horticulture	3

General Education

Select six credits of Communications courses	6
Select three credits of Humanities & Fine Arts courses (SPANISH 1116 Spanish for Horticulture Recommended)	3

Program Electives

Select a minimum of three credits from the following:	3
HORT 1110	Applied Plant Taxonomy
HORT 1108	Chainsaw Safety and Operation
HORT 1116	Spanish for Horticulture
HORT 1120	Landscape Lighting
HORT 1121	National Collegiate Landscape Competitions
HORT 1122	Pesticide Applicators Certification
HORT 1125	Water Use/Conservation in the Landscape
HORT 1131	Landscaping for Wildlife
HORT 1135	Introduction to Green Roofs
HORT 1140	Landscape Graphics
HORT 1141	Sustainable Landscape Design
HORT 1142	Landscaping for Pollinators
HORT 1145	Perennial Plant Communities I
HORT 1150	Power Equipment Electrical Systems
HORT 1151	2-Cycle Small Engine Repair/Maintenance
HORT 1152	4-Cycle Small Engine Repair/Maintenance
HORT 1185	Arboriculture
HORT 2221	Plant Propagation
HORT 2243	Ornamental Grasses
HORT 2244	Herbaceous Perennials
HORT 2245	Perennial Plant Communities II
HORT 2246	Perennial Plant Communities Stewardship

HORT 2256	Interior Plant Identification & Design
HORT 2271	Landscape Design II

Total Credits 71-72

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Landscape Design and Construction, Certificate

The **Landscape Design and Construction certificate** requires 41 credits in the courses listed below.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER.LAND

Code	Title	Credits
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1111	Landscape Design I	3
HORT 1112	Landscape Maintenance	3
HORT 1113	Landscape Construction	3
HORT 1114	Irrigation & Water Management	3
HORT 1140	Landscape Graphics	2
HORT 2211	Computer-Aided Drafting for Landscape	3
or ARCH 1211	Basic Computer-Aided Drafting-AutoCAD	
HORT 2241	Landscape Plants I	3
HORT 2242	Landscape Plants II	3
HORT 2244	Herbaceous Perennials	3
HORT 2271	Landscape Design II	3
HORT 2863	Internship (Career & Technical Ed)	3
MATH 1104	Mathematics for Horticulture	3

Total Credits 41

Nursery and Garden Center Management, Certificate

The **Nursery and Garden Center Management certificate** requires a total 35 credits in the courses listed below.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER.GRDN

Code	Title	Credits
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1130	Horticulture Business	3
or BUSIN 1100	Introduction to Business	

HORT 2221	Plant Propagation	3
HORT 2241	Landscape Plants I	3
HORT 2242	Landscape Plants II	3
HORT 2243	Ornamental Grasses	2
HORT 2244	Herbaceous Perennials	3
HORT 2251	Plant Pathology	3
HORT 2261	Entomology for Horticulture	3
HORT 2863	Internship (Career & Technical Ed)	3
MATH 1104	Mathematics for Horticulture	3
Total Credits		35

Power Equipment and Technology, Certificate

The Power Equipment and Technology Certificate prepares students for entry level jobs performing equipment maintenance and repairs. This program is accredited through the Engine and Equipment Training Council with certifications available.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER.POWEQ

Code	Title	Credits
HORT/AUTO 1150	Power Equipment Electrical Systems	3
HORT/AUTO 1151	2-Cycle Small Engine Repair/Maintenance	2
HORT/AUTO 1152	4-Cycle Small Engine Repair/Maintenance	3
HORT 2860	Internship (Career & Technical Ed)	1-4
Total Credits		9-12

Sustainable Landscapes, Certificate

The **Sustainable Landscapes certificate** provides students with the training and necessary background to apply sustainable landscape practices in the field.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER.SUSTAIN

Code	Title	Credits
HORT 1125	Water Use/Conservation in the Landscape	1
HORT 1131	Landscaping for Wildlife	1
HORT 1135	Introduction to Green Roofs	1
HORT 1141	Sustainable Landscape Design	1
HORT 1142	Landscaping for Pollinators	1
HORT 1145	Perennial Plant Communities I	2
HORT 2245	Perennial Plant Communities II	1
HORT 2246	Perennial Plant Communities Stewardship	1

HORT 2860	Internship (Career & Technical Ed)	1-4
Total Credits		10-13

Sustainable Urban Agriculture, A.A.S.

The Sustainable Urban Agriculture Degree offers a hands-on approach to becoming a professional in the field of urban farming and sustainable urban agriculture. The goal of the program is to help society improve the health of its environment, food, and communities. Students gain practical experience working alongside professional urban farmers. Students will critically analyze historical and current food systems to develop more sustainable solutions. The degree includes sustainable urban agriculture management and marketing techniques for food production systems.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Degree Requirements

Field of Study Code: HORT.AAS.URBAN

Code	Title	Credits
Program Requirements		
Select one of the following:		4-5
BIOLO 1110	Environmental Biology	
BIOLO 1151	Principles of Biological Science	
CHEM 1211	Survey of General Chemistry	
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1109	OSHA 10-Hour Landscape Safety	1
HORT 1125	Water Use/Conservation in the Landscape	1
HORT 1130	Horticulture Business	3
HORT 1135	Introduction to Green Roofs	1
HORT 1141	Sustainable Landscape Design	1
HORT 2253	Greenhouse Operations and Procedures	3
HORT 2300	Introduction to Sustainable Urban Agriculture	3
HORT 2301	Principles of Agroecology	3
HORT 2303	Urban Agriculture Issues	2
HORT 2304	Hydroponic and Aquaponic Production Systems	3
HORT 2305	Local Foods	2
HORT 2308	Introduction to Composting	1
HORT 2311	Cool Season Vegetable and Herb Production	2
HORT 2312	Warm Season Vegetable and Herb Production	2
HORT 2863	Internship (Career & Technical Ed)	3
MATH 1104	Mathematics for Horticulture	3
General Education		
Select six credits of Communications courses		6
Select three credits of Humanities & Fine Arts courses ^(SPANI 1116 Spanish for Horticulture Recommended)		3
Select three credits of Social & Behavioral Sciences courses		3
Program Electives		

Select 8 credits from the following: 8

BIOLO 2150	Ecology
BOTAN 1320	Prairie Ecology
EARTH 1135	Water Science-Fundamentals of Hydrology
HORT 1114	Irrigation & Water Management
HORT 1116	Spanish for Horticulture
HORT 1142	Landscaping for Pollinators
HORT 2200	Horticulture Field Study
HORT 2221	Plant Propagation
HORT 2251	Plant Pathology
HORT 2261	Entomology for Horticulture
HORT 2306	Introduction to Beekeeping
HORT 2309	Fruit and Berry Production
HORT 2310	Permaculture Design Certification
HORT 2313	Mushroom Production
MARKE 2210	Principles of Marketing
MATH 1428	College Algebra With Applications
MATH 1635	Statistics

Total Credits 64-65

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Sustainable Urban Agriculture, Certificate

The Sustainable Urban Agriculture Certificate program offers hands-on approach to becoming a professional in the field of urban farming and sustainable urban agriculture. Students receive practical, hands-on experience working in urban agriculture.

For more information about Horticulture, please visit the program page (<http://www.cod.edu/horticulture/>).

Certificate Requirements

Field of Study Code: HORT.CER.URBAN

Code	Title	Credits
Program Requirements		
HORT 1100	Introduction to Horticulture	3
HORT 1101	Soils and Fertilizers	3
HORT 1109	OSHA 10-Hour Landscape Safety	1
HORT 1130	Horticulture Business	3
HORT 2300	Introduction to Sustainable Urban Agriculture	3
HORT 2301	Principles of Agroecology	3
HORT 2311	Cool Season Vegetable and Herb Production	2
HORT 2312	Warm Season Vegetable and Herb Production	2
HORT 2863	Internship (Career & Technical Ed)	3
Program Electives		
Select five credits from the following:		5

HORT 1125	Water Use/Conservation in the Landscape	
HORT 1135	Introduction to Green Roofs	
HORT 1141	Sustainable Landscape Design	
HORT 1142	Landscaping for Pollinators	
HORT 2303	Urban Agriculture Issues	
HORT 2304	Hydroponic and Aquaponic Production Systems	
HORT 2305	Local Foods	
HORT 2306	Introduction to Beekeeping	
HORT 2308	Introduction to Composting	
HORT 2309	Fruit and Berry Production	
HORT 2310	Permaculture Design Certification	
HORT 2313	Mushroom Production	
Total Credits		28

Hospitality Management

Area of Study

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Gastronomy and Marketing in Hospitality, Certificate (<https://catalog.cod.edu/programs-study/hospitality-management/gastronomy-marketing-hospitality-certificate/>)
- Hospitality Foundations, Certificate (p. 114)
- Hospitality Management Operations, Certificate (p. 115)
- Hospitality Management, AAS (p. 115)
- Hospitality Sales and Marketing, Certificate (p. 115)
- Meeting and Event Planning, Certificate (p. 116)
- Meeting and Events Planning, AAS (p. 116)
- Resort Management, Certificate (p. 116)
- Restaurant Management, AAS (p. 116)
- Restaurant Management, Certificate (p. 117)
- Travel and Tourism Professional, Certificate (p. 117)
- Travel and Tourism Foundations, Certificate (p. 117)
- Travel and Tourism, AAS (p. 118)
- Wedding Planning Management, Certificate (p. 118)
- Wine Appreciation and Knowledge, Certificate (p. 118)

Hospitality Foundations, Certificate

The **Hospitality Foundations certificate** requires 12 credits in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.FOUN

Code	Title	Credits
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1111	Front Office Operations	3
HOSP 1121	Supervision in the Hospitality Industry	3
HOSP 1140	Quality Management of Service in the Hospitality Industry	3
Total Credits		12

Hospitality Management Operations, Certificate

The **Hospitality Management Operations** certificate requires 31 credits in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.OPER

Code	Title	Credits
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1111	Front Office Operations	3
HOSP 1112	Hospitality Facilities Management	3
HOSP 1121	Supervision in the Hospitality Industry	3
HOSP 1140	Quality Management of Service in the Hospitality Industry	3
HOSP 1151	Restaurant Service and Sales	2
HOSP 2253	Meeting and Event Management I	3
HOSP 2280	Hospitality Marketing Management	3
HOSP 2285	Advanced Hospitality Operations	3
HOSP 2862	Internship (Career & Technical Ed)	2
HOSP 2863	Internship (Career & Technical Ed)	3
Total Credits		31

Hospitality Management, A.A.S.

The Hospitality Management degree develops the leadership skills and management practices that are valued in the hospitality industry. This degree requires a minimum of 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Degree Requirements

Field of Study Code: HOSP.AAS.MGMT

Code	Title	Credits
Program Requirements		
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1111	Front Office Operations	3
HOSP 1112	Hospitality Facilities Management	3

HOSP 1121	Supervision in the Hospitality Industry	3
HOSP 1140	Quality Management of Service in the Hospitality Industry	3
HOSP 1151	Restaurant Service and Sales	2
HOSP 2130	Hospitality Industry Accounting	3
HOSP 2230	Law for the Hospitality Industry	3
HOSP 2253	Meeting and Event Management I	3
HOSP 2260	Hospitality Sales Management	3
HOSP 2280	Hospitality Marketing Management	3
HOSP 2285	Advanced Hospitality Operations	3
HOSP 2862	Internship (Career & Technical Ed)	2
CULIN 1120	Sanitation	1

Program Electives

Select 8 credits from any non-required courses within Culinary Arts or Hospitality and Tourism program areas ^{1,2} 8

General Education

Select 18 to 22 credits ² 18-22

Total Credits **64-68**

¹ The student can choose to include an external internship in the 8 credits.

² In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Hospitality Sales and Marketing, Certificate

The **Hospitality Sales and Marketing** certificate develops the skills needed to be successful in hospitality sales and marketing. This certificate also offers the opportunity to sell guest rooms for the Inn at Water's Edge, our on-campus boutique hotel, while completing an internship. This certificate requires 20 credits in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.SALE

Code	Title	Credits
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1111	Front Office Operations	3
HOSP 2203	Professional Catering & Banquet Management	3
HOSP 2253	Meeting and Event Management I	3
HOSP 2260	Hospitality Sales Management	3
HOSP 2280	Hospitality Marketing Management	3
HOSP 2862	Internship (Career & Technical Ed)	2
Total Credits		20

Meeting and Event Planning, Certificate

The Meeting and Event Planning certificate prepares a student for entry into the Meeting and Event Planning industries. The certificate requires a total of 29 credits in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.EVENT

Code	Title	Credits
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1106	Itineraries and Tour Packages	3
HOSP 1122	Food & Beverage for the Meeting Planner	2
HOSP 1153	The Science of Meetings	3
HOSP 2203	Professional Catering & Banquet Management	3
HOSP 2230	Law for the Hospitality Industry	3
HOSP 2253	Meeting and Event Management I	3
HOSP 2254	Meeting & Event Management II	3
HOSP 2280	Hospitality Marketing Management	3
HOSP 2290	Advanced Meeting & Event Management - Capstone	3
Total Credits		29

Meeting and Event Planning, A.A.S.

The Meeting and Event Planning degree is designed for students wishing to pursue a career in the Meetings, Expositions, Events, and Conventions (MEEC) industry. This degree requires a minimum of 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Degree Requirements

Field of Study Code: HOSP.AAS.EVENT

Code	Title	Credits
Program Requirements		
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1106	Itineraries and Tour Packages	3
HOSP 1111	Front Office Operations	3
HOSP 1121	Supervision in the Hospitality Industry	3
HOSP 1122	Food & Beverage for the Meeting Planner	2
HOSP 1153	The Science of Meetings	3
HOSP 2130	Hospitality Industry Accounting	3
HOSP 2203	Professional Catering & Banquet Management	3
HOSP 2230	Law for the Hospitality Industry	3

HOSP 2253	Meeting and Event Management I	3
HOSP 2254	Meeting & Event Management II	3
HOSP 2280	Hospitality Marketing Management	3
HOSP 2260	Hospitality Sales Management	3
HOSP 2290	Advanced Meeting & Event Management - Capstone	3
CULIN 1120	Sanitation	1

Program Electives

Students must complete 4 program credits in non-required Hospitality or Culinary Arts classes.^{1,2} 4

General Education

Students are required to take 18-22 general education as dictated by the AAS degree.² 18-22

Total Credits 64-68

¹ The student can choose to include an external internship in the 4 credits.

² In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Resort Management, Certificate

The modern resort must meet the needs of the vacationing guest by offering retail shops, guest activity programming, and a complete spa experience. This certificate provides students the opportunity to learn the nuance of this specialized area within hospitality management. The **Resort Management certificate** requires 26 credits in the courses below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.RESORT

Code	Title	Credits
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1105	Introduction to Resort Management	3
HOSP 1111	Front Office Operations	3
HOSP 1112	Hospitality Facilities Management	3
HOSP 1121	Supervision in the Hospitality Industry	3
HOSP 2105	Spa & Recreational Management	3
HOSP 2280	Hospitality Marketing Management	3
HOSP 2862	Internship (Career & Technical Ed)	2
HOSP 2863	Internship (Career & Technical Ed)	3
Total Credits		26

Restaurant Management, A.A.S.

The Restaurant Management degree provides an opportunity for students to learn the necessary skills for a management career in the food and beverage industry. This degree requires a minimum of 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Degree Requirements

Field of Study Code: HOSP.AAS.REST

Code	Title	Credits
Program Requirements		
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1121	Supervision in the Hospitality Industry	3
HOSP 1151	Restaurant Service and Sales	2
HOSP 1152	Advanced Restaurant Service	2
HOSP 2130	Hospitality Industry Accounting	3
HOSP 2203	Professional Catering & Banquet Management	3
HOSP 2230	Law for the Hospitality Industry	3
HOSP 2260	Hospitality Sales Management	3
HOSP 2261	Beverage Management Operation	2
HOSP 2280	Hospitality Marketing Management	3
HOSP 2285	Advanced Hospitality Operations	3
CULIN 1101	Introduction to Culinary Arts	3
CULIN 1102	Regional American Cuisine	4
CULIN 1120	Sanitation	1
CULIN 2152	Food, Beverage, and Equipment Purchasing	2
Program Electives		
Students must complete 6 program credits in non-required Hospitality or Culinary Arts classes. ^{1, 2}		6
General Education		
Refer to general education requirements for AAS degree. ¹		18-22
Total Credits		64-68

¹ The student can choose to include an external internship in the 6 credits.

² In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Restaurant Management, Certificate

The Restaurant Management certificate focuses on front of the house service skills. Upon completion, the student will be prepared for management positions in the restaurant industry. This certificate requires 13 credits in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.REST

Code	Title	Credits
HOSP 1100	Introduction to the Hospitality Industry	3
HOSP 1121	Supervision in the Hospitality Industry	3
HOSP 1140	Quality Management of Service in the Hospitality Industry	3
HOSP 1151	Restaurant Service and Sales	2
HOSP 1152	Advanced Restaurant Service	2
Total Credits		13

Travel and Tourism Professional, Certificate

The Travel and Tourism Professional certificate prepares students for a variety of careers in the travel and tourism industry. This program requires the completion of 43 credits from a selection of specialized courses designed to enhance skills and knowledge for professional success.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.PROF

Code	Title	Credits
HOSP 1101	Introduction to Travel & Tourism	3
HOSP 1103	Principles of the Travel Industry I	3
HOSP 1107	Principles of the Travel Industry II	3
HOSP 1106	Itineraries and Tour Packages	3
HOSP 1161	Travel Geography & Culture-The Americas	3
HOSP 1162	Travel Geography & Culture-Europe And Africa	3
HOSP 1163	Travel Geography & Culture-Asia and Pacific	3
HOSP 2000	Home Agency Operations	3
HOSP 2229	Revenues, Fares, & GDS	4
HOSP 2236	Cruise Industry Sales	3
HOSP 2280	Hospitality Marketing Management	3
HOSP 2130	Hospitality Industry Accounting	3
HOSP 2230	Law for the Hospitality Industry	3
HOSP 2260	Hospitality Sales Management	3
Total Credits		43

Travel and Tourism Foundations, Certificate

The Travel and Tourism Foundations certificate prepares students for entry-level positions in the Travel and Tourism Industry. The certificate requires the completion of 12 credits from the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.TTFDN

Code	Title	Credits
HOSP 1101	Introduction to Travel & Tourism	3
HOSP 1103	Principles of the Travel Industry I	3
HOSP 1107	Principles of the Travel Industry II	3
HOSP 1106	Itineraries and Tour Packages	3
Total Credits		12

Travel and Tourism, A.A.S.

The Travel and Tourism program is designed for individuals who plan to enter the travel industry or professionals who desire to update their skills. Career opportunities are available in a variety of areas including airline, cruise line, travel agencies, tour operators, destination management companies, tourism bureaus, and convention industries. The **Travel and Tourism degree** requires a minimum of 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Degree Requirements

Field of Study Code: HOSPAAS.TRVL

Code	Title	Credits
Program Requirements		
HOSP 1101	Introduction to Travel & Tourism	3
HOSP 1103	Principles of the Travel Industry I	3
HOSP 1107	Principles of the Travel Industry II	3
HOSP 1106	Itineraries and Tour Packages	3
HOSP 2236	Cruise Industry Sales	3
HOSP 2260	Hospitality Sales Management	3
HOSP 2280	Hospitality Marketing Management	3
HOSP 2130	Hospitality Industry Accounting	3
HOSP 2230	Law for the Hospitality Industry	3
HOSP 1161	Travel Geography & Culture-The Americas	3
HOSP 1162	Travel Geography & Culture-Europe And Africa	3
HOSP 1163	Travel Geography & Culture-Asia and Pacific	3
HOSP 2229	Revenues, Fares, & GDS	4
HOSP 2000	Home Agency Operations	3
Program Electives	Choose one course from the following options	3
HOSP 2863	Internship (Career & Technical Ed)	
HOSP 2250	Sustainable Tourism	
HOSP 1131	State and National Parks	
HOSP 1111	Front Office Operations	
HOSP 1151	Restaurant Service and Sales	
General Education		
General Education courses required for the AAS Degree. ¹		18-22
Total Credits		64-68

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Wedding Planning Management, Certificate

The **Wedding Planning Management certificate** will concentrate on the planning of a wedding and follow through to the implementation of the event. The certificate will also highlight the history of marriage, cultural and ethnic diversity in weddings, consumerism, venues, destination weddings and stress management. The student will also apply this learning through a business plan, marketing strategies, and client relations.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.WEDPLAN

Code	Title	Credits
HOSP 2256	Wedding Planning Management	4
Total Credits		4

Wine Appreciation and Knowledge, Certificate

Study the viticultural influences and techniques that impact the aroma, flavor, body, and style of wines and learn how certain practices affect wine flavor through lectures and tastings. You will learn what constitutes perfect ripeness for each region of the world. The **Wine Appreciation & Knowledge Certificate** requires 10 credits in the courses listed below.

For more information about Hospitality Management, please visit the program page (<http://www.cod.edu/hospitality/>).

Certificate Requirements

Field of Study Code: HOSP.CER.WINE

Code	Title	Credits
HOSP 1201	Introduction to Wine	2
HOSP 1202	Old World Wine Traditions	3
HOSP 1203	New World Wine Advancements	3
HOSP 1204	Wine and Food Pairing	2
Total Credits		10

Human Services

Area of Study

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Addictions Counseling, A.A.S. (p. 119)
- Addictions Counseling, Certificate (p. 119)
- Applied Gerontology, Certificate (p. 119)
- Co-occurring Disorders, Certificate (p. 120)
- Corrections Counseling, Certificate (p. 120)
- Developmental Disabilities, Certificate (p. 120)
- Human Services Domestic/Family Violence, Certificate (p. 120)
- Human Services Generalist, Certificate (p. 121)
- Human Services, A.A.S. (p. 121)
- Recovery Support Specialist, Certificate (<https://catalog.cod.edu/programs-study/human-services/recovery-support-specialist-certificate/>)
- Residential Child Care, Certificate (p. 121)
- Veteran Counseling, Certificate (p. 122)

Addictions Counseling, A.A.S.

The **Addictions Counseling degree** prepares students to work with an addictions population while earning an associate's degree. Advanced training meets Illinois Certification Board standards for the addictions counseling certification (CADC) with a passing exam score.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Degree Requirements

Field of Study Code: HUMAN.AAS.ADDIC

Code	Title	Credits
Program Requirements		
HUMAN 1100	Introduction to Human Services	3
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1114	Contemporary Practice Models	3
HUMAN 1121	Cross-Cultural Communications	3
HUMAN 1125	Introduction to Addictions	3
HUMAN 1126	Psychopharmacology for Addictions Counselors	3
HUMAN 1180 or HUMAN 2240	Interpersonal Violence Family Education and Treatment Models	3
HUMAN 2212	Group Dynamics	3
HUMAN 2223	Field Skills	1
HUMAN 2225	Addictions Counseling I	3
HUMAN 2226	Addictions Counseling II	3
HUMAN 2251	Fieldwork I	4
HUMAN 2252	Fieldwork II	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3
HUMAN 2280	Addictions Counseling III	3

General Education

Select 19 credits ¹	19
Total Credits	64

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Addictions Counseling, Certificate

The **Addictions Counseling certificate** provides accredited training to work with clients and their families on addictions and related problems. This program is approved by the Illinois Certification Board. A minimum of an AA/AS degree is required for Certified Alcohol and Other Drug Abuse Counselor (CADC) certification. The certificate requires the courses listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER.ADDIC

Code	Title	Credits
HUMAN 1113	Interpersonal Dynamics	4
HUMAN 1114	Contemporary Practice Models	3
HUMAN 1115	Please consult with your program/faculty adviser.	3
HUMAN 1121	Cross-Cultural Communications	4
HUMAN 1125	Introduction to Addictions	3
HUMAN 1126	Psychopharmacology for Addictions Counselors	3
HUMAN 2212	Group Dynamics	3
HUMAN 2225	Addictions Counseling I	4
HUMAN 2226	Addictions Counseling II	3
HUMAN 2240	Family Education and Treatment Models	3
HUMAN 2251	Fieldwork I	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3
Total Credits		40

Applied Gerontology, Certificate

The **Applied Gerontology certificate** prepares students to work with an older adult population to meet their unique needs. This certificate requires 38 credits in the courses listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER.GERON

Code	Title	Credits
HUMAN 1100	Introduction to Human Services	3
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1114	Contemporary Practice Models	3
HUMAN 1121	Cross-Cultural Communications	3
HUMAN 1125	Introduction to Addictions	3
HUMAN 1170	Role of Advocacy in Human Services	3
HUMAN 2212	Group Dynamics	3
HUMAN 2213	Grief Counseling	3
HUMAN 2214	Older Adult Care Management	4
HUMAN 2251	Fieldwork I	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3

Total Credits 35

Co-occurring Disorders, Certificate

Students who complete the **Co-occurring Disorders Certificate** will have solid foundational knowledge of people who experience both mental illness and substance use disorder. The skills and attitudes emphasized in this program of study will help prepare students to work with this population.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER.COOCR

Code	Title	Credits
HUMAN 1125	Introduction to Addictions	3
HUMAN 1140	Mental Health First Aid	1
HUMAN 1141	The Recovery Process	3
HUMAN 1175	Crisis Intervention	3

Total Credits 10

Corrections Counseling, Certificate

The **Corrections Counseling certificate** will provide specialized education for those working in the corrections counseling setting. This certificate requires 39 credits in the courses listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER.CORR

Code	Title	Credits
HUMAN 1100	Introduction to Human Services	3
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1115	Please consult with your program/faculty adviser.	3
HUMAN 1121	Cross-Cultural Communications	3

HUMAN 1125	Introduction to Addictions	3
HUMAN 1175	Crisis Intervention	3
HUMAN 1180	Interpersonal Violence	3
HUMAN 2200	Human Services Corrections Counseling	4
HUMAN 2212	Group Dynamics	3
HUMAN 2251	Fieldwork I	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3

Total Credits 35

Developmental Disabilities, Certificate

The **Developmental Disabilities certificate** provides specialized education to prepare an entry level human services professional to work with clients with developmental disabilities. The certificate requires 34 credits in the courses listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER.DEVDS

Code	Title	Credits
HUMAN 1100	Introduction to Human Services	3
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1114	Contemporary Practice Models	3
HUMAN 1121	Cross-Cultural Communications	3
HUMAN 1170	Role of Advocacy in Human Services	3
HUMAN 1175	Crisis Intervention	3
HUMAN 1190	Introduction-Developmental Disabilities	5
HUMAN 2212	Group Dynamics	3
HUMAN 2251	Fieldwork I	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3

Total Credits 33

Human Services Domestic/Family Violence, Certificate

The **Human Services Domestic/Family Violence certificate** prepares students for entry-level human services work in a domestic violence agency. This certificate requires 28 credits in program requirements courses as listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER.DOM

Code	Title	Credits
HUMAN 1100	Introduction to Human Services	3
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1121	Cross-Cultural Communications	3
HUMAN 1170	Role of Advocacy in Human Services	3

HUMAN 1175	Crisis Intervention	3
HUMAN 1180	Interpersonal Violence	3
HUMAN 2223	Field Skills	1
HUMAN 2251	Fieldwork I	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3
Total Credits		26

Human Services, A.A.S.

The **Human Services Generalist degree** prepares students for entry-level human services work with a broad range of populations. This degree includes program requirements, program electives, and general education in the courses listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Degree Requirements

Field of Study Code: HUMAN.AAS

Code	Title	Credits
Program Requirements		
HUMAN 1100	Introduction to Human Services	3
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1114	Contemporary Practice Models	3
HUMAN 1121	Cross-Cultural Communications	3
HUMAN 1125	Introduction to Addictions	3
HUMAN 1141	The Recovery Process	3
HUMAN 1170	Role of Advocacy in Human Services	3
HUMAN 1175	Crisis Intervention	3
HUMAN 1180	Interpersonal Violence	3
HUMAN 2212	Group Dynamics	3
HUMAN 2223	Field Skills	1
HUMAN 2240	Family Education and Treatment Models	3
HUMAN 2251	Fieldwork I	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3
Program Electives		
Select a minimum of four credit hours from the following: ¹		4
HUMAN 1105	Esteem Building	
HUMAN 1126	Psychopharmacology for Addictions Counselors	
HUMAN 1130	Psychedelic Mindview	
HUMAN 1140	Mental Health First Aid	
HUMAN 1160	Residential Child Care	
HUMAN 1165	Dynamics of Child Abuse	
HUMAN 1190	Introduction-Developmental Disabilities	
HUMAN 1820	Selected Topics I	
HUMAN 2200	Human Services Corrections Counseling	
HUMAN 2213	Grief Counseling	
HUMAN 2214	Older Adult Care Management	
HUMAN 2230	Grant Development for Non-Profit Organizations	
HUMAN 2286	Assessment of Clinical Issues for Veterans	
HUMAN 2288	Treatment Approaches for Veterans And Families	

General Education	
Select 19 credits ²	19
Total Credits	64

¹ With administrator consent, credits from another Social & Behavioral Sciences discipline may be applied.

² In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Human Services Generalist, Certificate

The **Human Services Generalist certificate** prepares students for entry-level human services work with a broad range of populations. This certificate requires 36 credits in the courses listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER

Code	Title	Credits
HUMAN 1100	Introduction to Human Services	3
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1114	Contemporary Practice Models	3
HUMAN 1121	Cross-Cultural Communications	3
HUMAN 1125	Introduction to Addictions	3
HUMAN 1141	The Recovery Process	3
HUMAN 1170	Role of Advocacy in Human Services	3
HUMAN 1175	Crisis Intervention	3
HUMAN 2212	Group Dynamics	3
HUMAN 2223	Field Skills	1
HUMAN 2251	Fieldwork I	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3
Total Credits		35

Residential Child Care, Certificate

The **Residential Child Care certificate** will provide specialized education for those working in the residential child care setting. This certificate requires 38 credits in the courses listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER.RESCC

Code	Title	Credits
HUMAN 1100	Introduction to Human Services	3
HUMAN 1113	Interpersonal Dynamics	3
HUMAN 1114	Contemporary Practice Models	3

HUMAN 1121	Cross-Cultural Communications	3
HUMAN 1160	Residential Child Care	4
HUMAN 1165	Dynamics of Child Abuse	3
HUMAN 1175	Crisis Intervention	3
HUMAN 1180	Interpersonal Violence	3
HUMAN 2212	Group Dynamics	3
HUMAN 2251	Fieldwork I	4
HUMAN 2279	Ethics & Legal Issues in Human Services	3
Total Credits		35

Veteran Counseling, Certificate

The **Veteran Counseling certificate** offers students specialized education for working with veterans. This certificate requires 20 credit hours in the courses listed below.

For more information about Human Services, please visit the program page (<http://www.cod.edu/humanservices/>).

Certificate Requirements

Field of Study Code: HUMAN.CER.VET

Code	Title	Credits
HUMAN 1125	Introduction to Addictions	3
HUMAN 1175	Crisis Intervention	2
HUMAN 2213	Grief Counseling	3
HUMAN 2251	Fieldwork I	4
HUMAN 2286	Assessment of Clinical Issues for Veterans	4
HUMAN 2288	Treatment Approaches for Veterans And Families	4
Total Credits		20

Integrated Engineering Technology

Area of Study

For more information about Integrated Engineering Technology, please visit the program page (<http://www.cod.edu/int-eng-tech/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Integrated Mechatronics and Manufacturing Technology, A.A.S. (p. 122)

Integrated Mechatronics and Manufacturing Technology, A.A.S.

The **Integrated Mechatronics and Manufacturing Technology degree** is designed to meet industry needs for multi- functional technicians competent in manufacturing, electro- mechanics, and electronics technology. InET engineering technicians apply scientific and engineering concepts to the implementation of existing technologies. Areas of focus

include installation, operation and maintenance of manufacturing and automated systems.

For more information about Integrated Engineering Technology, please visit the program page (<http://www.cod.edu/int-eng-tech/>).

Degree Requirements

Field of Study Code: INET.AAS.IMMT

Code	Title	Credits
Program Requirements		
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1101	Circuits I	3
ELMEC 1110	Motor & Generator Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
ELMEC 2510	Process and Automation Controls	3
ELMEC 2520	Industrial Control and Data Acquisition	3
MANUF 1101	Industrial Design/CAD	3
MANUF 1151	Machine Shop I	3
MANUF 2251	Computer Numerical Control (CNC)	3
MANUF 2252	CNC Operations	3
MANUF 2253	Computer-Aided Manufacturing (CAM)	3
MANUF 2280	Industrial Safety	2
Program Electives		
Select seven credits from the ELECT or ELMEC offerings		7
General Education		
Select 19 credits ¹		19
Total Credits		64

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Interior Design

Area of Study

For more information about Interior Design, please visit the program page (<http://www.cod.edu/interior-design/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Interior Design Computer Applications, Certificate (p. 123)
- Interior Design Lighting, Certificate (p. 123)
- Interior Design, A.A.S. (p. 123)
- Kitchen and Bath Design, Certificate (p. 124)

Interior Design Computer Applications, Certificate

The **Interior Design Computer Applications certificate** prepares students for computer support jobs in the design industry. The certificate requires 23 credits of design prerequisites and a wide array of computer courses.

For more information about Interior Design, please visit the program page (<http://www.cod.edu/interior-design/>).

Certificate Requirements

Field of Study Code: INTER.CER.COMP

Code	Title	Credits
Program Requirements		
INTER 1110	Introduction to Interior Design	3
INTER 1135	Visualization Techniques	3
INTER 1212	Computer-Aided Interior Design I	3
INTER 2135	Advanced Visualization Techniques	3
INTER 2212	Computer-Aided Interior Design II	3
INTER 2710	Portfolio Review	2
Program Electives		
Select two additional courses in specialized computer software from the following: ¹		6
INTER 2213	Computer-Aided Interior Design III	
INTER 2215	Building Information Modeling for Interior Design	
INTER 2515	Kitchen and Bath Computer Applications	
INTER 2216	Virtual Reality for Interior Design	
Total Credits		23

¹ In addition to the courses listed above.

Interior Design Lighting, Certificate

The **Interior Design Lighting certificate** prepares students for a support job in the lighting industry. Students focus on lighting fundamentals, new technology, various applications, and graphic communication methods required in the design industry.

For more information about Interior Design, please visit the program page (<http://www.cod.edu/interior-design/>).

Certificate Requirements

Field of Study Code: INTER.CER.LITE

Code	Title	Credits
Program Requirements		
INTER 1110	Introduction to Interior Design	3
INTER 1125	Sustainable Design	3
INTER 1135	Visualization Techniques	3
INTER 1190	Interior Design Codes and Standards	3
INTER 1212	Computer-Aided Interior Design I	3
INTER 2212	Computer-Aided Interior Design II	3

INTER 2311	Lighting I	3
INTER 2312	Lighting II	3
INTER 2710	Portfolio Review	2

Program Electives

INTER 2135	Advanced Visualization Techniques	3
or INTER 2213	Computer-Aided Interior Design III	

Total Credits **29**

Interior Design, A.A.S.

The Interior Design degree program prepares students to work in one of the vast array of jobs in the design industry or transfer to a baccalaureate program. Involving both creative and technical skills, the Interior Design profession is constantly evolving. NCIDQ, the board for Interior Design qualifications, defines the profession in this way: The Professional Interior Designer is qualified by education, experience, and examination to enhance the function and quality of interior spaces. The **Interior Design degree** requires 70 credits in program requirements, program electives and general education. Students wishing to qualify for the NCIDQ exam would need to complete additional Interior Design elective credits to satisfy NCIDQ requirements.

For more information about Interior Design, please visit the program page (<http://www.cod.edu/interior-design/>).

Degree Requirements

Field of Study Code: INTER.AAS

Code	Title	Credits
Program Requirements		
INTER 1110	Introduction to Interior Design	3
INTER 1125	Sustainable Design	3
INTER 1135	Visualization Techniques	3
INTER 1150	History of Interior Design	3
INTER 1170	Environmental Materials and Applications	3
INTER 1190	Interior Design Codes and Standards	3
INTER 1212	Computer-Aided Interior Design I	3
INTER 2110	Studio Foundation	3
INTER 2120	Furniture Specification and Budgets	2
INTER 2220	Interior Systems and Details	3
INTER 2311	Lighting I	3
INTER 2680	Professional Practice and Ethics	3
INTER 2710	Portfolio Review	2

General Education

Select 18 credits according to the AAS planning worksheet ¹ **18**

Program Electives

Design
Select three credits from the following: ¹ **3**

INTER 1821	Selected Topics	
INTER 1840	Independent Study	
INTER 2150	Historical Styles Design Studio	
INTER 2312	Lighting II	
INTER 2450	Senior Design Studio	
INTER 2511	Kitchen and Bath Design I	
INTER 2512	Kitchen and Bath Design II	

INTER 2520	Furniture Design	
INTER 2821	Advanced Selected Topics	
INTER 2870	Internship (Transfer)	
Studio		
Select nine credits from the following: ¹		9
INTER 2410	Residential Design Studio	
INTER 2420	Healthcare Design Studio	
INTER 2430	Contract Design Studio	
INTER 2440	Office Design Studio	
Technical		
Select three credits from the following: ¹		3
INTER 2135	Advanced Visualization Techniques	
INTER 2212	Computer-Aided Interior Design II	
INTER 2213	Computer-Aided Interior Design III	
INTER 2215	Building Information Modeling for Interior Design	
INTER 2515	Kitchen and Bath Computer Applications	
Total Credits		70

¹ In addition to the courses above.

Kitchen and Bath Design, Certificate

The **Kitchen and Bath Design Certificate** is accredited by the National Kitchen and Bath Association and prepares graduates with design and business skills necessary for industry professionals. This is an intensive career track certificate which includes a 2 credit hour internship of at least 160 work hours.

For more information about Interior Design, please visit the program page (<http://www.cod.edu/interior-design/>).

Certificate Requirements

Field of Study Code: INTER.CER.KBD

Code	Title	Credits
Program Requirements		
INTER 1110	Introduction to Interior Design	3
INTER 1125	Sustainable Design	3
INTER 1135	Visualization Techniques	3
INTER 1150	History of Interior Design	3
INTER 1170	Environmental Materials and Applications	3
INTER 1190	Interior Design Codes and Standards	3
INTER 1212	Computer-Aided Interior Design I	3
INTER 2220	Interior Systems and Details	3
INTER 2311	Lighting I	3
INTER 2511	Kitchen and Bath Design I	3
INTER 2512	Kitchen and Bath Design II	3
INTER 2680	Professional Practice and Ethics	3
INTER 2710	Portfolio Review	2
INTER 2860	Interior Design Kitchen/Bath Internship	2
Program Electives		
INTER 2212	Computer-Aided Interior Design II	3

or INTER 2515 Kitchen and Bath Computer Applications

Total Credits

43

Criminal and Justice Studies

Area of Study

For more information about Criminal and Justice Studies, please visit the program page (<http://www.cod.edu/justice-studies/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Criminal Justice, AAS (p. 124)
- Criminal Justice Transfer Pathway, AA (<https://catalog.cod.edu/programs-study/justice-studies/criminal-justice-transfer-pathway-aa/>)

Criminal Justice, A.A.S.

The Criminal Justice program is designed to prepare students for career entry or career advancement in criminal justice agencies. This program is particularly useful for those pursuing careers with local and state law enforcement agencies, and it can also prepare students for entry-level correctional and private security positions. The **Criminal Justice degree** requires 64 credits in program requirements, program electives, electives and general education in the courses listed below.

For more information about Justice Studies, please visit the program page (<http://www.cod.edu/justice-studies/>).

Degree Requirements

Field of Study Code: CRIMJ.AAS

Code	Title	Credits
Program Requirements		
CRIMJ 1100	Introduction to Criminal Justice	3
CRIMJ 1151	Constitutional Law	3
CRIMJ 2150	Multiculturalism and Diversity	3
Program Electives		
Select 12 credits from any 1000- or 2000-level Criminal Justice courses ¹		12
Electives		
Select 21 credits from any 1000- or 2000-level courses ¹		21
General Education		
Select 22 credits ¹		22
Total Credits		64

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Library and Information Technology

Area of Study

For more information about Library and Information Technology, please visit the program page (<http://www.cod.edu/lta/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Library and Information Technology, A.A.S. (p. 125)
- Library and Information Technology, Certificate (p. 125)

Library and Information Technology, A.A.S.

The Associate of Applied Science Degree in Library and Information Technology program prepares students for paraprofessional levels of library service. Courses are designed for students with no previous library experience, for those returning to the workforce, or those upgrading skills. Graduates of the program are prepared for the Library Support Staff Certification (LSSC). The LSSC Program is accredited by the American Library Association-Allied Professional Association (ALA-APA). This degree requires a minimum of 64 credits in program requirements, electives and general education in the courses listed below.

For more information about Library and Information Technology, please visit the program page (<http://www.cod.edu/lta/>).

Degree Requirements

Field of Study Code: LIBRA.AAS

Code	Title	Credits
Program Requirements		
LIBRA 1101	Intro to Libraries & the Information Age	3
LIBRA 1102	Introduction to Reference and Information Services	3
LIBRA 1103	Acquisition of Library Materials	3
LIBRA 1104	Essential Library Workplace Skills	3
LIBRA 1105	Readers Advisory	3
or LIBRA 2500	Service to Children and Young Adults	
LIBRA 2100	Introduction to Cataloging and Classification	4
LIBRA 2200	Serving the Public in Today's Libraries	4
LIBRA 2400	Library Technology	3
LIBRA 2600	Library Practicum	4
CIS 1150	Understand Computers/Information/Systems	3
MANAG 2220	Organizational Behavior	3
Electives		
Select ten credits from any 1000- or 2000-level courses ¹		10
General Education		

Select 18 to 22 credits ¹	18-22
Total Credits	64-68

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Library and Information Technology, Certificate

The Library and Information Technology certificate prepares students for paraprofessional levels of library service. Courses are designed for students with no library experience, for those returning to the workforce, or those upgrading skills. Upon completion of the certificate students have fulfilled proficiency required for the Library Support Staff Certification (LSSC). The LSSC Program is accredited by the American Library Association-Allied Professional Association (ALA-APA). This certificate requires 30 credits in the courses listed below and is stackable into the AAS in Library and Information Technology.

For more information about Library and Information Technology, please visit the program page (<http://www.cod.edu/lta/>).

Certificate Requirements

Field of Study Code: LIBRA.CER

Code	Title	Credits
LIBRA 1101	Intro to Libraries & the Information Age	3
LIBRA 1102	Introduction to Reference and Information Services	3
LIBRA 1103	Acquisition of Library Materials	3
LIBRA 1104	Essential Library Workplace Skills	3
LIBRA 1105	Readers Advisory	3
or LIBRA 2500	Service to Children and Young Adults	
LIBRA 2100	Introduction to Cataloging and Classification	4
LIBRA 2200	Serving the Public in Today's Libraries	4
LIBRA 2400	Library Technology	3
LIBRA 2600	Library Practicum	4
Total Credits		30

Long Term Care Administration

Area of Study

For more information about Long Term Care Administration, please visit the program page (<http://www.cod.edu/academics/programs/long-term-care/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Long-Term Care Administration, Certificate (p. 126)

Long-Term Care Administration, Certificate

The **Long-Term Care Administration certificate** program prepares students for a variety of administrative and management positions in agencies providing long-term health care. The certificate is approved by the Illinois Department of Financial and Professional Regulation as meeting the educational requirements of the state of Illinois Nursing Home Administrators Licensing and Disciplinary Act. The coursework also meets the requirements of Section 1310.40 "Approved Nursing Home Administration Courses." Upon successful completion of the certificate, students are eligible to take the Illinois Nursing Home Administrators Licensure Exam.

Students must complete ENGLI 1101, LTC 1130, LTC 1140, and LTC 1160 with a grade of C or higher for program completion and must complete the program within five years of start date.

For more information about Long Term Care Administration, please visit the program page (<https://www.cod.edu/academics/programs/long-term-care/>).

Certificate Requirements

Field of Study Code: LTC.CER

Code	Title	Credits
ENGLI 1101	English Composition I	3
LTC 1130	Introduction to Long-Term Care Services	3
LTC 1140	Introduction to Nursing Home Administration	3
LTC 1160	Social Gerontology and Long-Term Care	3
ACCOU 2140	Financial Accounting	4
MANAG 2240	Human Resources Management	3
Total Credits		19

Students must complete ENGLI 1101, LTC 1130, LTC 1140, and LTC 1160 with a grade of C or higher for program completion and must complete the program within five years of start date.

Magnetic Resonance Imaging Technology

Area of Study

For more information about Magnetic Resonance Imaging Technology, please visit the program page (<http://www.cod.edu/mri/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Magnetic Resonance Imaging Advanced Certificate (p. 126)

Magnetic Resonance Imaging Advanced Certificate

Magnetic Resonance Imaging (MRI) uses strong magnetic fields and radio-frequency waves to obtain cross-sectional anatomical images of the human body. The MRI program at the College of DuPage is a three semester advanced certificate program designed for graduates of a two-year radiography program. The **Magnetic Resonance Imaging (MRI) Technology certificate** requires 27 credits in the courses listed below.

For more information about Magnetic Resonance Imaging Technology, please visit the program page (<http://www.cod.edu/mri/>).

This certificate requires program application and admission; please visit the above link for details.

Certificate Requirements

Field of Study Code: MRIT.CER

Code	Title	Credits
MRIT 2101	Physical Principles and Instrumentation	3
MRIT 2102	Sectional Anatomy	3
MRIT 2103	Principles and Procedures I	3
MRIT 2104	Clinical Practice I	3
MRIT 2105	MR Pathology	3
MRIT 2106	Imaging Applications	3
MRIT 2107	Principles and Procedures II	3
MRIT 2108	Clinical Practice II	3
MRIT 2109	Clinical Practice III	3
Total Credits		27

Management

Area of Study

For more information about Management, please visit the program page (<http://www.cod.edu/management/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Business Environment and Concepts, Certificate (p. 126)
- Entrepreneurship, Certificate (p. 127)
- Human Resource Management (HRM), Certificate (p. 127)
- Management, A.A.S. (p. 127)
- Management, Certificate (p. 128)
- Organizational Leadership, Certificate (p. 128)
- Supervision, Certificate (p. 128)

Business Environment and Concepts, Certificate

The **Business Environment and Concepts** certificate is designed for CPA Examination candidates who have a non-business baccalaureate degree.

This certificate satisfies the Business Ethics, Business Communications, and Business hours required to sit for the CPA Exam. This certificate requires 24 credits in program requirements.

For more information about Management, please visit the program page (<http://www.cod.edu/management/>).

Certificate Requirements

Field of Study Code: MANAG.CER.BEC

Code	Title	Credits
Program Requirements		
BUSLW 2211	Business Law I	3
BUSLW 2212	Business Law II	3
PHILO 1114	Business Ethics	3
Select one of the following:		3
ENGLI 1105	Workplace Writing	
ENGLI 1110	Technical Writing	
SPEEC 1150	Introduction to Business Communication	
OFTI 1130	Business Correspondence	
Electives		
Select 12 hours of any Business, Management, Marketing, or Economics courses		12
Total Credits		24

Entrepreneurship, Certificate

The **Entrepreneurship certificate** requires a minimum of 12 credits in the courses listed below.

For more information about Management, please visit the program page (<http://www.cod.edu/management/>).

Certificate Requirements

Field of Study Code: MANAG.CER.ENTR

Code	Title	Credits
Program Requirements		
ACCOU 1110 or ACCOU 2140	Accounting Procedures Financial Accounting	3-4
BUSIN 1161	Entrepreneurship	3
BUSIN 2200	Small Business Budgeting & Finance	3
Program Electives		
Select one of the following: ¹		3
BUSIN 1111	Customer Service	
BUSLW 2211	Business Law I	
MANAG 1100	Supervision	
MANAG 2210	Principles of Management	
MANAG 2230	Purchasing	
MANAG 2240	Human Resources Management	
MARKE 1100	Consumer Marketing	
MARKE 2210	Principles of Marketing	
MARKE 2220	Principles of Selling	
MARKE 2230	Principles of Retail	

MARKE 2270 Digital Marketing

Total Credits 12-13

¹ In addition to the courses listed above.

Human Resource Management (HRM), Certificate

The **Human Resource Management (HRM) certificate** is designed to develop HR competencies required to launch and/or advance an HR career. Skills and experiences in HR processes and policies, networking, building connections, and mentoring and coaching are developed. Courses provide competency development for use by HR professionals in small, medium, and large-size human resource departments and/or in an employment role as an HR department of one.

For more information about Management, please visit the program page (<http://www.cod.edu/management/>).

Certificate Requirements

Field of Study Code: MANAG.CER.HRM

Code	Title	Credits
MANAG 2240	Human Resources Management	3
MANAG 2242	Talent Acquisition and Retention	2
MANAG 2245	Compensation, Benefits, and Total Rewards	2
MANAG 2248	Strategic Human Resources Management	2
Total Credits		9

Management, A.A.S.

The Management degree prepares students for management and supervisory responsibilities in business and industry. Graduates have many employment opportunities, including retailing, production, sales, customer service, human resources management, project management, or supply chain/logistics. Students may also choose to establish their own businesses.

For more information about Management, please visit the program page (<http://www.cod.edu/management/>).

Degree Requirements

Field of Study Code: MANAG.AAS

Code	Title	Credits
Program Requirements		
MANAG 2210	Principles of Management	3
MANAG 2220	Organizational Behavior	3
MANAG 2240	Human Resources Management	3
MANAG 2170	Project Management	3
ACCOU 2140 or BUSIN 2200	Financial Accounting Small Business Budgeting & Finance	4
BUSIN 1100	Introduction to Business	3
BUSLW 2205 or BUSLW 2211	Legal Environment of Business Business Law I	3
MARKE 2210	Principles of Marketing	3

ECONO 2201	Principles of Macroeconomics	3
PHILO 1114	Business Ethics	3
or PHILO 1110	Ethics	
Program Electives		
Select 16 to 17 college-level credits from any program or discipline. Consult with faculty advisor to identify courses that align with your professional goals.		16-17
General Education		13
Must take 4 hour science class w/lab.		
Total Credits		60-61

Management, Certificate

The Management Certificate explores managerial functions of planning, organizing, leading, and controlling. Provides students with the necessary skills to coordinate and oversee the work of organizational resources.

For more information about Management, please visit the program page (<http://www.cod.edu/management/>).

Certificate Requirements

Field of Study Code: MANAG.CER

Code	Title	Credits
MANAG 2210	Principles of Management	3
MANAG 2240	Human Resources Management	3
BUSIN 1100	Introduction to Business	3
BUSIN 2200	Small Business Budgeting & Finance	3-4
or ACCOU 2140	Financial Accounting	
Program Electives		6
Total Credits		18-19

Organizational Leadership, Certificate

The Organizational Leadership Certificate provides students with a specialized credential of management competencies. The certificate focuses on developing organizational leadership abilities, effective communication, and problem-solving skills.

For more information about Management, please visit the program page (<http://www.cod.edu/management/>).

Certificate Requirements

Field of Study Code: MANAG.CER.ORG

Code	Title	Credits
MANAG 2210	Principles of Management	3
MANAG 2215	Leadership	3
MANAG 2220	Organizational Behavior	3
Total Credits		9

Supervision, Certificate

The Supervision Certificate provides students with a specialized credential of first-line management and administration competencies. The certificate focuses on developing employee communication skills, coaching and mentoring employees, determining employee work assignments, and understanding business functions and goals.

For more information about Management, please visit the program page (<http://www.cod.edu/management/>).

Certificate Requirements

Field of Study Code: MANAG.CER.SPRV

Code	Title	Credits
MANAG 1100	Supervision	3
MANAG 2220	Organizational Behavior	3
BUSIN 1100	Introduction to Business	3
Total Credits		9

Manufacturing Technology

Area of Study

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Automated Manufacturing Systems, A.A.S. (p. 128)
- Automated Manufacturing Systems, Certificate (p. 129)
- CNC Job Readiness, Certificate (<https://catalog.cod.edu/programs-study/manufacturing-technology/cnc-job-readiness-certificate/>)
- CNC Operations, Certificate (p. 129)
- Computer-Aided Design, Certificate (p. 130)
- Drafting/Design, Certificate (p. 130)
- Manufacturing Engineering Technology, A.A.S. (p. 130)
- Manufacturing Skills Standards, Certificate (p. 131)
- Manufacturing Technology Drafting/Design, A.A.S. (p. 131)
- Manufacturing Technology, A.A.S. (p. 132)
- Manufacturing Technology, Certificate (p. 132)
- Mold Making, Certificate (p. 133)
- Tool and Die Making, Certificate (p. 133)

Automated Manufacturing Systems, A.A.S.

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing,

robotics and numerical control. Drafting/Design prepares the students for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. This degree requires 66 credits in program requirements, program electives and general education in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Degree Requirements

Field of Study Code: MANUF.AAS.AUTO

Code	Title	Credits
Program Requirements		
MANUF 1101	Industrial Design/CAD	3
MANUF 1104	Technical Mechanics	2
MANUF 1110	Metrology	3
MANUF 1121	Physical Metallurgy	3
MANUF 1151	Machine Shop I	3
MANUF 1180	Quality Control	3
MANUF 2202	Solid Modeling and Design	3
MANUF 2251	Computer Numerical Control (CNC)	3
MANUF 2253	Computer-Aided Manufacturing (CAM)	3
MANUF 2280	Industrial Safety	2
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1171	Introduction to Robotic Technology	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
Program Electives		
Select six credits from the following: ¹		6
MANUF 1153	Advanced Machine Processes	
MANUF 1160	Technical Static & Strength of Material	
MANUF 2201	Geometric Dimensioning and Tolerancing	
MANUF 2203	Manufacturing Processes and Design	
MANUF 2206	Mechanical Computr-Aided Drafting/Design	
MANUF 2207	Tool Design	
MANUF 2271	Robotic Application	
General Education		
Select 20 credits ¹		20
Communications: Written (3 credits)		
Communications: Oral (3 credits)		
Physical/Life Sciences (3-5 credits)		
Mathematics (3-5 credits, 1000 level or above)		
Humanities (3 credits)		
Social & Behavioral Science (3 credits)		
Total Credits		66

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Automated Manufacturing Systems, Certificate

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. This certificate requires 35 credits in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER.AUTO

Code	Title	Credits
MANUF 1101	Industrial Design/CAD	3
MANUF 1104	Technical Mechanics	2
MANUF 1151	Machine Shop I	3
MANUF 1180	Quality Control	3
MANUF 2200	Production Technology	4
MANUF 2251	Computer Numerical Control (CNC)	3
MANUF 2253	Computer-Aided Manufacturing (CAM)	3
MANUF 2280	Industrial Safety	2
ELMEC 1141	Hydraulics and Pneumatics	3
ELMEC 1171	Introduction to Robotic Technology	3
ELMEC 1190	Intro to Programmable Logic Controllers	3
MATH 1115	Technical Mathematics I	3
Total Credits		35

CNC Operations, Certificate

Students will learn operations of Computer Numerical Control (CNC) controlled machining and turning centers. The **CNC Operations Certificate** requires 17 credits from the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER.CNC

Code	Title	Credits
MANUF 1101	Industrial Design/CAD	3
MANUF 1151	Machine Shop I	3
MANUF 2251	Computer Numerical Control (CNC)	3
MANUF 2252	CNC Operations	3
MANUF 2253	Computer-Aided Manufacturing (CAM)	3
MANUF 2280	Industrial Safety	2
Total Credits		17

Computer-Aided Design, Certificate

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. This certificate requires 24 credits in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER.CAD

Code	Title	Credits
Program Requirements		
MANUF 1101	Industrial Design/CAD	3
MANUF 2202	Solid Modeling and Design	3
MANUF 2203	Manufacturing Processes and Design	3
MANUF 2206	Mechanical Computr-Aided Drafting/Design	3
MANUF 2207	Tool Design	3
MANUF 2208	Mechanical Design Portfolio	3
Program Electives		
Select six credits from the following: ¹		6
MANUF 1110	Metrology	
MANUF 1121	Physical Metallurgy	
MANUF 2201	Geometric Dimensioning and Tolerancing	
MANUF 2280	Industrial Safety	
MANUF 2281	Cost Analysis	
ELECT 1100	Electricity and Electronics Fundamentals	
ELMEC 1141	Hydraulics and Pneumatics	
Total Credits		24

¹ In addition to the courses listed above.

Drafting/Design, Certificate

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. This certificate requires 38 credits in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER.DRAFT

Code	Title	Credits
MANUF 1101	Industrial Design/CAD	3
MANUF 1104	Technical Mechanics	2
MANUF 1151	Machine Shop I	3
MANUF 1180	Quality Control	3
MANUF 2201	Geometric Dimensioning and Tolerancing	3
MANUF 2202	Solid Modeling and Design	3
MANUF 2203	Manufacturing Processes and Design	3
MANUF 2206	Mechanical Computr-Aided Drafting/Design	3
MANUF 2207	Tool Design	3
MANUF 2208	Mechanical Design Portfolio	3
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
MATH 1115	Technical Mathematics I	3
Total Credits		38

Manufacturing Engineering Technology, A.A.S.

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering

technician positions in manufacturing. This degree requires 65 credits in program requirements and general education in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Degree Requirements

Field of Study Code: MANUF.AAS.MET

Code	Title	Credits
Program Requirements		
MANUF 1101	Industrial Design/CAD	3
MANUF 1121	Physical Metallurgy	3
MANUF 1151	Machine Shop I	3
MANUF 1160	Technical Static & Strength of Material	4
MANUF 1180	Quality Control	3
MANUF 2202	Solid Modeling and Design	3
MANUF 2203	Manufacturing Processes and Design	3
MANUF 2251	Computer Numerical Control (CNC)	3
MANUF 2253	Computer-Aided Manufacturing (CAM)	3
MANUF 2281	Cost Analysis	2
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
MATH 1431	Precalculus I	5
MATH 1432	Precalculus II: Trigonometry	3
MATH 1635	Statistics	4
PHYSI 1201	General Physics I	5
General Education		
Select 12 additional credits ¹		
Communications: Written		3
Communications: Oral		3
Humanities		3
Social & Behavioral Sciences		3
Total Credits		65

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Manufacturing Skills Standards, Certificate

This certificate provides the technical knowledge required for achievement of the Manufacturing Skills Standards Council (MSSC) certification and requires seven credits in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER.MSSC

Code	Title	Credits
MANUF 1104	Technical Mechanics	2
MANUF 1180	Quality Control	3
MANUF 2280	Industrial Safety	2
Total Credits		7

Manufacturing Technology Drafting/Design, A.A.S.

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. This degree requires 65 credits in program requirements, program electives and general education in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Degree Requirements

Field of Study Code: MANUF.AAS.DRAFT

Code	Title	Credits
Program Requirements		
MANUF 1101	Industrial Design/CAD	3
MANUF 1104	Technical Mechanics	2
MANUF 1121	Physical Metallurgy	3
MANUF 1151	Machine Shop I	3
MANUF 1180	Quality Control	3
MANUF 2202	Solid Modeling and Design	3
MANUF 2203	Manufacturing Processes and Design	3
MANUF 2206	Mechanical Computr-Aided Drafting/Design	3
MANUF 2207	Tool Design	3
MANUF 2208	Mechanical Design Portfolio	3
ELECT 1100	Electricity and Electronics Fundamentals	3
Program Electives		
Select 13 credits from the following: ¹		13
MANUF 1110	Metrology	
MANUF 2201	Geometric Dimensioning and Tolerancing	
MANUF 2251	Computer Numerical Control (CNC)	
MANUF 2280	Industrial Safety	
MANUF 2281	Cost Analysis	
ELMEC 1141	Hydraulics and Pneumatics	
ELMEC 1171	Introduction to Robotic Technology	
ELMEC 1190	Intro to Programmable Logic Controllers	

WELD 1100	Welding I
General Education	
Select 20 credits ¹	20
Communication: Written (3 credits)	
Communication: Oral (3 credits)	
Physical/Life Sciences (3-5 credits)	
Mathematics (3-5 credits, 1000 level or above)	
Humanities (3 credits)	
Social & Behavioral Sciences (3 credits)	
Total Credits	65

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Manufacturing Technology, A.A.S.

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry-level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. The **Manufacturing Technology degree** requires 65 credits in program requirements, program electives and general education in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Degree Requirements

Field of Study Code: MANUF.AAS

Code	Title	Credits
Program Requirements		
MANUF 1101	Industrial Design/CAD	3
MANUF 1104	Technical Mechanics	2
MANUF 1110	Metrology	3
MANUF 1151	Machine Shop I	3
MANUF 1153	Advanced Machine Processes	3
MANUF 1180	Quality Control	3
MANUF 2251	Computer Numerical Control (CNC)	3
ELECT 1100	Electricity and Electronics Fundamentals	3
ELECT 1141	Digital Fundamentals	3
WELD 1100	Welding I	3
Program Electives		
Select 16 credits from the following: ¹		16

MANUF 1121	Physical Metallurgy
MANUF 2201	Geometric Dimensioning and Tolerancing
MANUF 2202	Solid Modeling and Design
ELMEC 1171	Introduction to Robotic Technology
WELD 1112	Oxy-Fuel, Welding, Plasma Cutting and Brazing
WELD 1122	Shielded Arc Welding (SMAW)
WELD 1132	Metal Inert Gas (MIG) Carbon Steel Welding
WELD 1142	Gas Tungsten Arc (TIG)
General Education	
Select 20 credits ¹	20
Communications: Written (3 credits)	
Communications: Oral (3 credits)	
Physical/Life Sciences (3-5 credits)	
Mathematics (3-5 credits, 1000 level or above)	
Humanities (3 credits)	
Social & Behavioral Sciences (3 credits)	
Total Credits	65

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Manufacturing Technology, Certificate

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. This certificate provides a foundation for the four degree options in the program: Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER

Code	Title	Credits
Program Requirements		
MANUF 1101	Industrial Design/CAD	3
MANUF 1104	Technical Mechanics	2
MANUF 1110	Metrology	3
MANUF 1121	Physical Metallurgy	3
MANUF 1151	Machine Shop I	3
MANUF 1153	Advanced Machine Processes	3
MANUF 1180	Quality Control	3
MATH 1115	Technical Mathematics I	3
or WELD 1100	Welding I	
ELECT 1100	Electricity and Electronics Fundamentals	3
ELMEC 1141	Hydraulics and Pneumatics	3
Program Electives		

Select six credits from the following:¹

ELMEC 1171	Introduction to Robotic Technology
MANUF 1102	Basic Robotics Fabrication
MANUF 2201	Geometric Dimensioning and Tolerancing
MANUF 2251	Computer Numerical Control (CNC)
MANUF 2253	Computer-Aided Manufacturing (CAM)
WELD 1122	Shielded Arc Welding (SMAW)
WELD 1132	Metal Inert Gas (MIG) Carbon Steel Welding
WELD 1142	Gas Tungsten Arc (TIG)

Total Credits

35

¹ In addition to the courses listed above.

Mold Making, Certificate

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. This certificate requires 31 credits in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER.MOLD

Code	Title	Credits
MANUF 1127	Engineering Materials of Industry	3
MANUF 2200	Production Technology	4
MANUF 2265	Mold Making I	4
MANUF 2267	Mold Making II	4
MANUF 2276	Advanced Mold Making and Engineering I	4
MANUF 2277	Advanced Mold Making and Engineering II	4
MATH 1115	Technical Mathematics I	3
MATH 1116	Technical Mathematics II	5

Total Credits

31

Tool and Die Making, Certificate

The Manufacturing Technology program provides training in a wide variety of skill areas of product manufacturing and services. The four degree options in the program are Automated Manufacturing Systems, Drafting/Design, Manufacturing Technology and Manufacturing Engineering Technology. Automated Manufacturing is designed to prepare the student for careers in computer-aided manufacturing, robotics and numerical control. Drafting/Design prepares the student for

careers in the drafting and computer-aided design areas. Manufacturing Technology provides the student with a broad background in the areas of machining, drafting and fluid systems so as to prepare them for entry level positions as machine operators, machine maintenance personnel and quality control personnel. The Manufacturing Engineering Technology degree prepares students for entry-level engineering technician positions in manufacturing. This certificate requires 31 credits in the courses listed below.

For more information about Manufacturing Technology, please visit the program page (<http://www.cod.edu/manufacturing/>).

Certificate Requirements

Field of Study Code: MANUF.CER.TOOL

Code	Title	Credits
MANUF 1127	Engineering Materials of Industry	3
MANUF 2200	Production Technology	4
MANUF 2261	Basic Die Making I	4
MANUF 2262	Basic Die Making II	4
MANUF 2272	Advanced Die Making and Engineering I	4
MANUF 2274	Advanced Die Making and Engineering II	4
MATH 1115	Technical Mathematics I	3
MATH 1116	Technical Mathematics II	5

Total Credits

31

Marketing

Area of Study

For more information about Marketing, please visit the program page (<http://www.cod.edu/marketing/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Consumer Marketing, Certificate (p. 133)
- Digital and Social Media Marketing, Certificate (p. 134)
- Marketing, A.A.S. (p. 134)
- Marketing, Certificate (p. 134)

Consumer Marketing, Certificate

The **Consumer Marketing certificate** prepares students for customer service and consumer relations responsibilities.

For more information about Marketing, please visit the program page (<http://www.cod.edu/marketing/>).

Certificate Requirements

Field of Study Code: MARKE.CER.CON

Code	Title	Credits
Program Requirements		
MARKE 2225	Consumer Behavior	3
MARKE 2210	Principles of Marketing	3

Program Electives		
Select two of the following: ¹		6
BUSIN 1111	Customer Service	
MARKE 1100	Consumer Marketing	
MARKE 1150	Social Media Marketing	
MARKE 2220	Principles of Selling	
MARKE 2230	Principles of Retail	
MARKE 2240	Advertising	
Total Credits		12

¹ In addition to the courses listed above.

Digital and Social Media Marketing, Certificate

The **Digital & Social Media Marketing Certificate** provides students the foundational understanding of developing a digital marketing strategy. Students will be able to optimize a company's digital marketing efforts through SEO, digital content creation, analysis of digital metrics, develop email campaigns, and learn best website practices. Students will have the opportunity to earn related industry certifications.

For more information about Marketing, please visit the program page (<http://www.cod.edu/marketing/>).

Certificate Requirements

Field of Study Code: MARKE.CER.DIGITAL

Code	Title	Credits
MARKE 1150	Social Media Marketing	3
MARKE 2235	Introduction to Digital Marketing Analytics	3
MARKE 2270	Digital Marketing	3
Total Credits		9

Marketing, A.A.S.

The Marketing program provides academic and practical background for a successful career in this dynamic field. Graduates have many employment opportunities, including sales, customer service, digital and social media marketing, retailing, or promotion.

For more information about Marketing, please visit the program page (<http://www.cod.edu/marketing/>).

Degree Requirements

Field of Study Code: MARKE.AAS

Code	Title	Credits
Program Requirements		33-34
MARKE 2210	Principles of Marketing	3
MARKE 2220	Principles of Selling (or)	3
or MARKE 2240	Advertising	
MARKE 2225	Consumer Behavior	3
MARKE 2230	Principles of Retail	3
MARKE 2270	Digital Marketing	3
ACCOU 2140	Financial Accounting (or)	3-4

or BUSIN 2200	Small Business Budgeting & Finance	
BUSIN 1100	Introduction to Business	3
BUSLW 2205	Legal Environment of Business	3
or BUSLW 2211	Business Law I	
ECONO 2201	Principles of Macroeconomics	3
MANAG 2210	Principles of Management	3
PHILO 1114	Business Ethics	3
or PHILO 1110	Ethics	
Program Electives		13-14

Select 13 to 14 college-level credits from any program or discipline. Consult with faculty advisor to identify courses that align with your professional goals.

General Education

Must take 4 hour science class w/lab.	13
Total Credits	60

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Marketing, Certificate

The Marketing Certificate explores practical applications of product, place, price and promotion strategies. Provides students with necessary skills for career advancement in marketing.

For more information about Marketing, please visit the program page (<http://www.cod.edu/marketing/>).

Certificate Requirements

Field of Study Code: MARKE.CER

Code	Title	Credits
Program Requirements		
MARKE 2210	Principles of Marketing	3
MARKE 2270	Digital Marketing	3
BUSIN 1100	Introduction to Business	3
ACCOU 2140	Financial Accounting	3-4
or BUSIN 2200	Small Business Budgeting & Finance	
Program Electives		
Select 3 credits from the following: Marketing		3
Select 3 credits from the following: Marketing, Management, Business Law or Economics		3
Total Credits		18-19

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Medical Assistant

Area of Study

For more information about Medical Assistant, please visit the program page (<http://www.cod.edu/medical-assistant/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Health Care Office Assistant, Certificate (<https://catalog.cod.edu/programs-study/medical-assistant/healthcare-office-assistant-certificate/>)
- Medical Assistant, A.A.S. (p. 135)
- Medical Assistant, Certificate (p. 135)

Medical Assistant, A.A.S.

Medical assistants are trained to work in ambulatory settings, such as physicians' offices. These multi-skilled personnel perform administrative and clinical procedures such as billing and coding, maintaining medical records, appointment scheduling, recording vital signs, preparing patients for examination, collecting blood specimens, performing basic laboratory tests, performing electrocardiograms (EKGs), preparing and administering medications, and assisting physicians with treatment and minor procedures. This degree requires a minimum of 64 credits in program requirements and electives.

For more information about Medical Assistant, please visit the program page (<http://www.cod.edu/medical-assistant/>).

Degree Requirements

Field of Study Code: MASST.AAS

Code	Title	Credits
Program Requirements		
MASST 1125	Introduction to Medical Assisting	1
MASST 1131	Administrative Procedures for the Health Care Office	2
MASST 1133	Practice Finance for Medical Assistants	3
MASST 2211	Legal and Ethical Aspects of Health Care	3
MASST 2233	Pathophysiology for Medical Assisting	3
MASST 2235	Diagnostic Procedures for Medical Assistants	3
MASST 2237	Assisting With Medical Specialties	3
MASST 2239	Medical Assistant Clinical Procedures	3
MASST 2245	Workplace Development for Medical Assistants	2
MASST 2250	Medical Assistant Practicum	3
MASST 2253	Certified Medical Assistant Exam Prep	1
Select one of the following:		4-8
ANAT 1500	Survey of Human Anatomy and Physiology	
ANAT 1551 & ANAT 1552	Human Anatomy and Physiology I and Human Anatomy and Physiology II	
ANAT 1571 & ANAT 1572	Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	
Select one of the following:		2-3
CIS 1110	Introduction to Informatics	
CIS 1150	Understand Computers/Information/Systems	

OFTI 1200	Microsoft 365 for Business Professionals	
ENGLI 1101	English Composition I	3
or ENGLI 1105	Workplace Writing	
HLTHS 1110	Biomedical Terminology	3
MATH 1102	Mathematics for Health Sciences	3
PSYCH 1100	General Psychology	3
Select one of the following:		3
SPEEC 1100	Fundamentals of Speech Communication	
SPEEC 1120	Small-Group Communication	
SPEEC 1150	Introduction to Business Communication	
Electives		
Select any additional credits from any 1000- or 2000-level courses to meet degree requirement of 64 credits		13
General Education		
Select three credits to meet Humanities/Fine Arts AAS degree requirement		3
Total Credits		64-69

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Medical Assistant, Certificate

Medical assistants are trained to work in ambulatory settings such as physicians' offices. These multi-skilled personnel perform administrative and clinical procedures such as billing and coding, maintaining medical records, completing basic clinical assessments, recording vital signs, preparing patients for examination, collecting blood specimens, performing basic laboratory tests, performing electrocardiograms (EKGs), preparing and administering medications, and assisting physicians with treatment and/or minor procedures. This certificate requires a minimum of 39 credits in program requirements.

For more information about Medical Assistant, please visit the program page (<http://www.cod.edu/medical-assistant/>).

Certificate Requirements

Field of Study Code: MASST.CER

Code	Title	Credits
Program Required Courses		
Select one of the following:		4-8
ANAT 1500	Survey of Human Anatomy and Physiology	
ANAT 1551 & ANAT 1552	Human Anatomy and Physiology I and Human Anatomy and Physiology II	
ANAT 1571 & ANAT 1572	Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	
Select one of the following:		2-3
CIS 1110	Introduction to Informatics	
CIS 1150	Understand Computers/Information/Systems	
OFTI 1200	Microsoft 365 for Business Professionals	
HLTHS 1110	Biomedical Terminology	3
MASST 1125	Introduction to Medical Assisting	1

MASST 1131	Administrative Procedures for the Health Care Office	2
MASST 1133	Practice Finance for Medical Assistants	3
MASST 2211	Legal and Ethical Aspects of Health Care	3
MASST 2233	Pathophysiology for Medical Assisting	3
MASST 2235	Diagnostic Procedures for Medical Assistants	3
MASST 2237	Assisting With Medical Specialties	3
MASST 2239	Medical Assistant Clinical Procedures	3
MASST 2245	Workplace Development for Medical Assistants	2
MASST 2250	Medical Assistant Practicum	3
MASST 2253	Certified Medical Assistant Exam Prep	1
PSYCH 1100	General Psychology	3
Total Credits		39-44

Motion Picture/Television

Area of Study

For more information about Motion Picture/Television, please visit the program page (<http://www.cod.edu/mptv/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Animation, A.A.S. (p. 136)
- Animation, Certificate (p. 136)
- Digital Broadcast Journalism, A.A.S. (p. 137)
- Film/Video Production, A.A.S. (p. 137)
- Media Literacy, Journalism, and Production, Certificate (<https://catalog.cod.edu/programs-study/motion-picture-television/media-literacy-journalism-production-certificate/>)
- Motion Picture/Television, Certificate (p. 138)
- Television Production, A.A.S. (p. 138)

Animation, A.A.S.

The Animation degree specializes in preparing students for employment and/or transfer in the field of animation. Students will explore and become proficient in the basics of animation and computer-generated imagery. This program will teach students techniques in story development, character design, animation, motion control, lighting and sound for animation. The Animation degree requires a minimum of 64 credits in program requirements, program electives, electives and general education in the courses listed below.

For more information about Motion Picture/Television, please visit the program page (<http://www.cod.edu/mptv/>).

Degree Requirements

Field of Study Code: MPTV.AAS.ANIMAT

Code	Title	Credits
Program Requirements		
MPTV 1020	Editing for Motion Pictures and Television	3
MPTV 1311	Introduction to Animation	3
MPTV 1313	History of Animation	3
MPTV 1324	Motion Graphics and Special Effects I	3
MPTV 2331	3-D Animation I	3
MPTV 2342	Animation Portfolio	3
ART 1101	Drawing I	3
ART 1102	Drawing II	3
ART 1151	Two-Dimensional Foundations Studio	3
ART 2201	Life Drawing I	3
ART 2266	Digital Art I	3
GRDSN 2210	Cartooning	3
GRDSN 2211	Storyboarding/Sequential Art	3
Program Electives		
Select six credits from any 1000- or 2000-level Motion Picture/Television faculty adviser-approved ^{1, 2}		6
Electives		
Select three credits from any 1000- or 2000-level Motion Picture/Television or general education course ²		3
General Education		
Select 16 to 19 credits ²		16-19
Total Credits		64-67

- ¹ Suggested course: MPTV 2333 Motion Graphics and Special Effects II
² In addition to the course listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Animation, Certificate

The Motion Picture/Television program specializes in preparing students for employment and/or transfer in the fields of film, video, television, animation and audio production. Graduates find jobs in industry, education and government; although a knowledge of motion picture or television production is also helpful for those seeking careers in advertising, public relations and other related fields. A hands-on approach to learning is emphasized. Several courses are transfer oriented. The Animation certificate requires 45 credits in the courses listed below.

For more information about Motion Picture/Television, please visit the program page (<http://www.cod.edu/mptv/>).

Certificate Requirements

Field of Study Code: MPTV.CER.ANIMA

Code	Title	Credits
Program Requirements		
MPTV 1020	Editing for Motion Pictures and Television	3
MPTV 1311	Introduction to Animation	3
MPTV 1313	History of Animation	3
MPTV 1324	Motion Graphics and Special Effects I	3

MPTV 2331	3-D Animation I	3
MPTV 2342	Animation Portfolio	3
ART 1101	Drawing I	3
ART 1102	Drawing II	3
ART 1151	Two-Dimensional Foundations Studio	3
ART 2201	Life Drawing I	3
ART 2266	Digital Art I	3
GRDSN 2210	Cartooning	3
GRDSN 2211	Storyboarding/Sequential Art	3

Program Electives

Select six credits from any 1000- or 2000-level Motion Picture/Television faculty adviser-approved courses ¹	6

Total Credits	45

¹ In addition to the courses listed above.

Digital Broadcast Journalism, A.A.S.

The Motion Picture/Television program specializes in preparing students for employment and/or transfer in the field of broadcast journalism. Students will explore and become proficient in the basics of broadcast journalism, news, and talk-show production. This program will teach students techniques in news story gathering, on-camera talent techniques, field production, and studio production. The Digital Broadcast Journalism degree requires a minimum of 61 credits in program requirements, program electives, and general education in the courses listed below.

For more information about Motion Picture/Television, please visit the program page (<http://www.cod.edu/mptv/>).

Degree Requirements

Field of Study Code: MPTV.AAS.BROADCST

Code	Title	Credits
Program Requirements		
MPTV 1220	Introduction to Television Studio Production	3
MPTV 1422	Video Journalism	3
MPTV 2231	TV News Field Production	3
MPTV 2233	Documentary Production	3
MPTV 2430	Content Creator for Social Media	3
MPTV 2435	Sports Reporting and Broadcasting Techniques	3
MPTV 1011	Introduction to Motion Picture and Television	3
MPTV 2440	Advanced On-Air Broadcasting	3
MCOMM 1100	Introduction to Mass Communication	3
MCOMM 1105	News Reporting & Writing for Multimedia	3
MCOMM 2100	Social Media As News	3

Program Elective

Select 10 credits from any 1000- or 2000-level Mptv or Mcomm course that is not a required course ¹	10

General Education

Select 18 to 22 credits ¹	18-22

Total Credits	61-65

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Film/Video Production, A.A.S.

The Motion Picture/Television program specializes in preparing students for employment and/or transfer in the fields of film, video, television, animation and audio production. Graduates find jobs in industry, education, and government. Additionally, a knowledge of motion picture or television production is also helpful for those seeking careers in advertising, public relations and other related fields. A hands-on approach to learning is emphasized. Several courses are transfer oriented. This degree program requires a minimum of 64 credits in program requirements, program electives and general education courses.

For more information about Motion Picture/Television, please visit the program page (<http://www.cod.edu/mptv/>).

Degree Requirements

Field of Study Code: MPTV.AAS.FILM

Code	Title	Credits
Program Requirements		
MPTV 1011	Introduction to Motion Picture and Television	3
MPTV 1020	Editing for Motion Pictures and Television	3
MPTV 1022	Audio for Motion Pictures and Television	3
MPTV 1145	Film History	3
MPTV 1135	Introduction to Film Art	3
MPTV 1120	Cinematography	3
MPTV 2022	Screenwriting for Short Forms	3
MPTV 2031	Pre-Production for Motion Picture and Television	3
MPTV 2131	Film/Video Production	3
MPTV 2113	Directing for Film/Video	3
MPTV 2140	Advanced Film/Video Production	3

Program Electives

Select at least 12 credits from any MPTV courses that are not listed as a program requirement ^{1,2}	12

General Education

Select 19 to 22 credits ²	19-22

Total Credits	64-67

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Motion Picture/Television, Certificate

The **Motion Picture/Television certificate** requires 45 credits in the courses listed below.

For more information about Motion Picture/Television, please visit the program page (<http://www.cod.edu/mptv/>).

Certificate Requirements

Field of Study Code: MPTV.CER

Code	Title	Credits
Program Requirements		
MPTV 1011	Introduction to Motion Picture and Television	3
MPTV 1020	Editing for Motion Pictures and Television	3
MPTV 1022	Audio for Motion Pictures and Television	3
MPTV 1111	Film/Video Aesthetics	3
MPTV 1120	Cinematography	3
MPTV 1220	Introduction to Television Studio Production	3
MPTV 2022	Screenwriting for Short Forms	3
MPTV 2031	Pre-Production for Motion Picture and Television	3
MPTV 2113 & MPTV 2140 or MPTV 2231 & MPTV 2440	Directing for Film/Video and Advanced Film/Video Production TV News Field Production and Advanced On-Air Broadcasting	6
Program Electives		
Select at least 15 credits from the following: ¹		15
MPTV 1145	Film History	
MPTV 1311	Introduction to Animation	
MPTV 1320	Experimental Animation	
MPTV 1822	Selected Topics II	
MPTV 2233	Documentary Production	
MPTV 2331	3-D Animation I	
MPTV 2340	Three-Dimensional Animation II	
MPTV 2822	Advanced Selected Topics II	
Total Credits		45

¹ In addition to the courses listed above.

Television Production, A.A.S.

The Motion Picture/Television program specializes in preparing students for employment and/or transfer in the fields of film, video, television, animation and audio production. Graduates find jobs in industry, education and government; although a knowledge of motion picture or television production also is helpful for those seeking careers in advertising, public relations and other related fields. A hands-on approach to learning is emphasized. Several courses are transfer oriented. The degree requires a minimum of 66 credits in program requirements, program electives and general education in the courses listed below.

For more information about Motion Picture/Television, please visit the program page (<http://www.cod.edu/mptv/>).

Degree Requirements

Field of Study Code: MPTV.AAS.PROD

Code	Title	Credits
Program Requirements		
MPTV 1011	Introduction to Motion Picture and Television	3
MPTV 1020	Editing for Motion Pictures and Television	3
MPTV 1213	History of Television	3
MPTV 1220	Introduction to Television Studio Production	3
MPTV 1222	Writing for Television	3
MPTV 1324	Motion Graphics and Special Effects I	3
MPTV 2031	Pre-Production for Motion Picture and Television	3
MPTV 2134	On-Location TV Production	3
MPTV 2231	TV News Field Production	3
MPTV 2233	Documentary Production	3
MPTV 2240	Advanced Television Production	3
Program Electives		
Select at least 14 credits from the following: ¹		14
MPTV 1311	Introduction to Animation	
MPTV 1320	Experimental Animation	
MPTV 1822	Selected Topics II	
MPTV 2331	3-D Animation I	
MPTV 2340	Three-Dimensional Animation II	
MPTV 2822	Advanced Selected Topics II	
General Education		
Select 19 to 22 credits ¹		19-22
Total Credits		66-69

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Music

Area of Study

For more information about Music, please visit the program page (<http://www.cod.edu/music/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Audio Production, Certificate (p. 139)
- Music Business, A.A.S. (p. 139)

- Music, A.F.A. Music (<https://catalog.cod.edu/programs-study/music/afa-music/>)

Audio Production, Certificate

The **Audio Production Certificate** is intended for individuals interested in professional music production. This includes careers in live sound, audio recording, radio and television production, and internet production. This certificate requires 24 credits in the courses listed below.

For more information about Music, please visit the program page (<http://www.cod.edu/music/>).

Certificate Requirements

Field of Study Code: MUSIC.CER.AUDIO

Code	Title	Credits
MUSIC 1101	Music Theory I	3
MUSIC 1107	Aural Skills I	1
MUSIC 1113	Survey of Music Business	3
MUSIC 1171	Class Piano I	1
MUSIC 2211	Recording Techniques I	3
MUSIC 2212	Recording Techniques II	3
BUSIN 1161	Entrepreneurship	3
or MARKE 2270	Digital Marketing	
CIS 1400	Programming Logic and Technique	4
or PHYSI 1100	Physics	
ELECT 1100	Electricity and Electronics Fundamentals	3
Total Credits		24

Music Business, A.A.S.

The Music Business degree is a curriculum designed to prepare students for careers in music industry. The degree is designed for the student interested in pursuing business opportunities involving music. This program combines elements of the traditional music curriculum with business, marketing, management, and music industry courses. This degree requires 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Music, please visit the program page (<http://www.cod.edu/music/>).

Degree Requirements

Field of Study Code: MUSIC.AAS

Code	Title	Credits
Program Requirements		
MUSIC 1101	Music Theory I	3
MUSIC 1102	Music Theory II	3
MUSIC 1104	Introduction to American Music	3
or MUSIC 1115	Introduction to World Music	
MUSIC 1107	Aural Skills I	1
MUSIC 1108	Aural Skills II	1
MUSIC 1113	Survey of Music Business	3
MUSIC 1171	Class Piano I	1
MUSIC 1172	Class Piano II	1

MUSIC 1185	Applied Music II: Music Major	2
MUSIC 2201	Music Theory III	3
MUSIC 2202	Music Theory IV	3
MUSIC 2207	Aural Skills III	1
MUSIC 2208	Aural Skills IV	1
MUSIC 2211	Recording Techniques I	3
MUSIC 2271	Class Piano III	1
MUSIC 2272	Class Piano IV	1
ACCOU 2140	Financial Accounting	
BUSIN 1100	Introduction to Business	3
MANAG 2210	Principles of Management	3
MARKE 2210	Principles of Marketing	3
PHYSI 1100	Physics	4
MATH 1100	Business Mathematics	3

Electives

MUSIC 1185	Applied Music II: Music Major ¹	2

Program Electives

Music Ensembles

Select two credits from the following:	2

MUSIC 1120	College of DuPage Concert Choir
MUSIC 1125	College of DuPage Jazz Choir
MUSIC 1130	College of DuPage Chamber Singers
MUSIC 1140	Symphony Orchestra
MUSIC 1141	Chamber Orchestra
MUSIC 1150	DuPage Chorale
MUSIC 1180	Community Band
MUSIC 1181	DuPage Community Jazz Ensemble
MUSIC 1190	COD Jazz & Popular Music Ensembles
MUSIC 1192	Percussion Ensemble
MUSIC 1193	Guitar Ensemble
MUSIC 1195	Opera Workshop

General Education

Select nine credits; Social and Behavioral Sciences and Communications. ²	9

Total Credits	60

¹ MUSIC 1185 Applied Music II: Music Major needs to be taken for two semesters to facilitate one year of private instrumental study on the student's major instrument.

² In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Nursing

Area of Study

For more information about Nursing, please visit the program page (<http://www.cod.edu/nursing/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Nursing, A.A.S. (p. 140)
- Practical Nursing (PN), Certificate (p. 140)

Nursing, A.A.S.

The Associate of Applied Science Degree Nursing program prepares graduates to deliver nursing care in various health care environments. Upon successful completion of the program, students are eligible to take the Registered Nursing (RN) licensing exam National Council Licensure Examination-Registered Nurse (NCLEX-RN). The Illinois Department of Financial & Professional Regulation (IDFPR) awards the license upon successful completion of the exam.

For more information about Nursing, please visit the program page (<http://www.cod.edu/nursing/>).

This degree requires program application and admission; please visit the above link for details.

Degree Requirements

Field of Study Code: NURSI.AAS

Code	Title	Credits
Program Requirements		
NURSI 1120	Role of the Nurse I	1
NURSI 1130	Introduction to Core Concepts	4
NURSI 1140	Physical Assessment	2
NURSI 1150	Pathophysiology-Altered Health Concepts	3
NURSI 1170	Nursing Pharmacology and Disease Process	3
NURSI 1220	Health and Illness Concepts I	5
NURSI 1230	Family Health Concepts I	5
NURSI 2120	Health and Illness Concepts II	5
NURSI 2130	Family Health Concepts II	5
NURSI 2320	Complex Health Problems	4
NURSI 2330	Role of the Nurse II	1
NURSI 2340	Clinical Decision Making Practicum	2
ANAT 1551 & ANAT 1552	Human Anatomy and Physiology I and Human Anatomy and Physiology II	8
or ANAT 1571 & ANAT 1572	Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	
ENGLI 1101	English Composition I	3
MATH 1102	Mathematics for Health Sciences	3
MICRO 1420	Microbiology	4
PSYCH 1100	General Psychology	3
PSYCH 2237	Developmental Psychology: The Life Span	3
SPEEC 1100	Fundamentals of Speech Communication	3
or SPEEC 1120	Small-Group Communication	
General Education		

Select three credits in Humanities/Fine Arts requirement ¹	3
Total Credits	70

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Practical Nursing (PN), Certificate

Curriculum integrates classroom, laboratory, and clinical instruction to teach concepts and skills that the Practical Nurse (PN) contributes to care of patients. Graduates are eligible to take the NCLEX-PN exam. This certificate is only available to students admitted into the Associate Degree Nursing Program.

For more information about Nursing, please visit the program page (<http://www.cod.edu/nursing/>).

Certificate Requirements

Field of Study Code: NURSI.CER

Code	Title	Credits
MICRO 1420	Microbiology	4
ENGLI 1101	English Composition I	3
NURSI 1120	Role of the Nurse I	1
NURSI 1130	Introduction to Core Concepts	4
NURSI 1140	Physical Assessment	2
NURSI 1150	Pathophysiology-Altered Health Concepts	3
NURSI 1160	Foundations of Pharmacology	2-3
or NURSI 1170	Nursing Pharmacology and Disease Process	
NURSI 1220	Health and Illness Concepts I	5
NURSI 1230	Family Health Concepts I	5
PSYCH 1100	General Psychology	3
PSYCH 2237	Developmental Psychology: The Life Span	3
Total Credits		35-36

Office Technology Information

Area of Study

For more information about Office Technology Information, please visit the program page (<http://www.cod.edu/ofti/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Administrative Support and Meeting/Event Planning, A.A.S. (<https://catalog.cod.edu/programs-study/office-technology-information/administrative-support-meeting-event-planning-aas/>)
- Administrative Support and Meeting/Event Planning, Certificate (<https://catalog.cod.edu/programs-study/office-technology->

information/administrative-support-meeting-event-planning-certificate/)

- Administrative Support Essentials, Certificate (p. 141)
- Administrative Support Specialist, A.A.S. (p. 141)
- Administrative Support Specialist, Certificate (p. 141)
- Executive Assistant, A.A.S. (p. 142)
- Medical Office, Certificate (p. 142)
- Office Technology Specialist, Certificate (p. 142)
- Word Specialist, Certificate (p. 142)

Administrative Support Essentials, Certificate

The Administrative Support Essentials certificate provides additional opportunity for administrative professionals and progresses into the Administrative Support Specialist certificate and degree.

For more information about Office Technology Information, please visit the program page (<http://www.cod.edu/ofti/>).

Certificate Requirements

Field of Study Code: OFTI.CER.ESSN

Code	Title	Credits
OFTI 1100	Keyboarding and Document Fundamentals	3
OFTI 1130	Business Correspondence	3
OFTI 1200	Microsoft 365 for Business Professionals	3
OFTI 1201	Advanced Microsoft 365	3
OFTI 1203	E-Mail and Electronic Communication	3
OFTI 1210	Word Processing I	3
OFTI 1215	Advanced Word Processing/ Desktop Publishing	3
OFTI 1250	Electronic Presentations for Business Professionals	3
OFTI 2500	Professional Office Capstone	3
OFTI 2600	Professional Development	3
CIS 1221	Data Analysis with Spreadsheets	3
Total Credits		33

Administrative Support Specialist, A.A.S.

The Administrative Support Specialist degree prepares students by developing and enhancing their skills using current technologies in today's office. Courses are designed for students entering the Office Technology Information curriculum for the first time and for students preparing for a return to the work force. This degree requires a minimum of 64 credits in program requirements, program electives and general education in the courses listed below.

For more information about Office Technology Information, please visit the program page (<http://www.cod.edu/ofti/>).

Degree Requirements

Field of Study Code: OFTI.AAS.SUPRT

Code	Title	Credits
Program Requirements		
OFTI 1100	Keyboarding and Document Fundamentals	3
OFTI 1130	Business Correspondence	3
OFTI 1200	Microsoft 365 for Business Professionals	3
OFTI 1201	Advanced Microsoft 365	3
OFTI 1203	E-Mail and Electronic Communication	3
OFTI 1210	Word Processing I	3
OFTI 1215	Advanced Word Processing/ Desktop Publishing	3
OFTI 1250	Electronic Presentations for Business Professionals	3
OFTI 1300	Virtual Office Assistant	3
OFTI 2500	Professional Office Capstone	3
OFTI 2600	Professional Development	3
ACCOU 2140	Financial Accounting	4
BUSIN 1100	Introduction to Business	3
MANAG 2210	Principles of Management	3
Program Electives		3
Select one three credit hour course from OFTI or CIS ^{1, 2}		
General Education		18-22
Select 18 to 22 credits		
Total Credits		64-68

¹ CIS 1221 Data Analysis with Spreadsheets is highly recommended.

² Please contact OFTI Chair for current list of OFTI electives.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Administrative Support Specialist, Certificate

The Administrative Support Specialist certificate prepares students by developing and enhancing their skills using current technologies in today's office. Courses are designed for students entering the administrative support workforce.

For more information about Office Technology Information, please visit the program page (<http://www.cod.edu/ofti/>).

Certificate Requirements

Field of Study Code: OFTI.CER.SUPRT

Code	Title	Credits
OFTI 1100	Keyboarding and Document Fundamentals	3
OFTI 1130	Business Correspondence	3
OFTI 1200	Microsoft 365 for Business Professionals	3
OFTI 1201	Advanced Microsoft 365	3
OFTI 1203	E-Mail and Electronic Communication	3
OFTI 1210	Word Processing I	3
OFTI 1215	Advanced Word Processing/ Desktop Publishing	3

OFTI 1250	Electronic Presentations for Business Professionals	3
OFTI 1300	Virtual Office Assistant	3
OFTI 2500	Professional Office Capstone	3
OFTI 2600	Professional Development	3
CIS 1221	Data Analysis with Spreadsheets	3
BUSIN 1100	Introduction to Business	3
ACCOU 2140	Financial Accounting	4
MANAG 2210	Principles of Management	3
Total Credits		46

Executive Assistant, A.A.S.

The Office Technology Information program prepares students by developing and enhancing their skills using current technologies in today's office. Courses required are designed for student with some related office experience or for students preparing to return to the workforce. The degree prepares students to assist executives through general office procedures and overall organization in an office environment. The **Executive Assistant degree** requires 64 credits in program requirements and general education in the courses listed below.

For more information about Office Technology Information, please visit the program page (<http://www.cod.edu/ofti/>).

Degree Requirements

Field of Study Code: OFTI.AAS.EXEC

Code	Title	Credits
Program Requirements		
OFTI 1130	Business Correspondence	3
OFTI 1200	Microsoft 365 for Business Professionals	3
OFTI 1203	E-Mail and Electronic Communication	3
OFTI 1210	Word Processing I	3
OFTI 1215	Advanced Word Processing/ Desktop Publishing	3
OFTI 1250	Electronic Presentations for Business Professionals	3
OFTI 2500	Professional Office Capstone	3
OFTI 2600	Professional Development	3
ACCOU 2140	Financial Accounting	4
BUSIN 2200	Small Business Budgeting & Finance	3
BUSIN 1100	Introduction to Business	3
BUSLW 2211	Business Law I	3
CIS 1221	Data Analysis with Spreadsheets	3
MANAG 2210	Principles of Management	3
MANAG 2220	Organizational Behavior	3
General Education		
Select 18 credits ¹		18
Total Credits		64

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Medical Office, Certificate

The Medical Office certificate prepares the student for an entry level administrative support position into the medical office environment.

For more information about Office Technology Information, please visit the program page (<http://www.cod.edu/ofti/>).

Certificate Requirements

Field of Study Code: OFTI.CER.MEDOF

Code	Title	Credits
OFTI 1100	Keyboarding and Document Fundamentals	3
OFTI 1130	Business Correspondence	3
OFTI 1200	Microsoft 365 for Business Professionals	3
OFTI 2600	Professional Development	3
HLTHS 1110	Biomedical Terminology	3
MASST 1130	Introduction to Medical Assisting	3
MASST 2211	Legal and Ethical Aspects of Health Care	3
Total Credits		21

Office Technology Specialist, Certificate

The **Office Technology Specialist certificate** prepares the student for an entry-level administrative support position. This certificate requires 18 credits in the courses listed below.

For more information about Office Technology Information, please visit the program page (<http://www.cod.edu/ofti/>).

Certificate Requirements

Field of Study Code: OFTI.CER.SPEC

Code	Title	Credits
OFTI 1200	Microsoft 365 for Business Professionals	3
OFTI 1203	E-Mail and Electronic Communication	3
OFTI 1210	Word Processing I	3
OFTI 1215	Advanced Word Processing/ Desktop Publishing	3
OFTI 1250	Electronic Presentations for Business Professionals	3
CIS 1221	Data Analysis with Spreadsheets	3
Total Credits		18

Word Specialist, Certificate

The **Word Specialist certificate** develops MS Word skills and includes topics for industry certification. This certificate requires 6 credits in the courses listed below.

For more information about Office Technology Information, please visit the program page (<http://www.cod.edu/ofti/>).

Certificate Requirements

Field of Study Code: OFTI.CER.WORD

Code	Title	Credits
OFTI 1210	Word Processing I	3
OFTI 1215	Advanced Word Processing/ Desktop Publishing	3
Total Credits		6

Ophthalmic Technician

Area of Study

For more information about Ophthalmic Technician, please visit the program page (<http://www.cod.edu/ophthalmic-tech/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Ophthalmic Technician, A.A.S. (p. 143)

Ophthalmic Technician, A.A.S.

The **Ophthalmic Technician** program prepares the student to be an integral member of the eye care team. Emphasis is on fundamental and advanced clinical procedures to assist optometrists and ophthalmologists in the acquisition, preparation, and application of various types of equipment required for the delivery of eye care. Additionally, this degree will prepare students to sit for the national certification exam.

For more information about Ophthalmic Technician, please visit the program page (<http://www.cod.edu/ophthalmic-tech/>).

Degree Requirements

Field of Study Code: OPTH.AAS

Code	Title	Credits
Program Requirements		
Select one of the following:		4-8
ANAT 1500	Survey of Human Anatomy and Physiology	
ANAT 1551 & ANAT 1552	Human Anatomy and Physiology I and Human Anatomy and Physiology II	
ANAT 1571 & ANAT 1572	Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	
HLTHS 1110	Biomedical Terminology	3
SURGT 1000	Ethical Considerations in the Health Care Industry	3
EYE 1101	Principles of Eye Care Assistant I	8
EYE 1102	Principles of Eye Care Assistant II	8
EYE 1103	Principles of Eye Care Assistant III	9
OPTH 2101	Ophthalmic Technician I	4

OPTH 2102	Ophthalmic Technician II	5
OPTH 2103	Ophthalmic Technician III	5
Select one of the following:		3
SPEEC 1100	Fundamentals of Speech Communication	
SPEEC 1120	Small-Group Communication	
SPEEC 1150	Introduction to Business Communication	
ENGLI 1101 or ENGLI 1105	English Composition I Workplace Writing	3
Select one of the following:		3-5
MATH 1102	Mathematics for Health Sciences	
MATH 1100	Business Mathematics	
MATH 1120	Mathematical Foundations for Diagnostic Medical Imaging Sonographers	
MATH 1635	Statistics	
PSYCH 2280	Statistics/Social & Behavioral Sciences	
SOCIO 2205	Statistics for the Social and Behavioral Sciences	
MATH 1428	College Algebra With Applications	
MATH 1431	Precalculus I	
General Education ¹		
Select three credits in Humanities and Fine Arts		3
Select three credits in Social and Behavioral Sciences		3
Total Credits		64-70

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Photography

Area of Study

For more information about Photography, please visit the program page (<http://www.cod.edu/photography/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Digital Photography, Certificate (<https://catalog.cod.edu/programs-study/photography/digital-photography-certificate/>)
- Photography Technology, A.A.S. (p. 144)
- Photography Technology, Certificate (p. 143)

Photography Technology, Certificate

The **Photography Technology certificate** is designed to prepare students with foundational skills necessary to enter the photography industry. This certificate requires 46-47 credits in program requirements, program emphasis courses, and program electives.

For more information about Photography, please visit the program page (<http://www.cod.edu/photography/>).

Certificate Requirements

Field of Study Code: PHOTO.CER.TECH

Code	Title	Credits
Program Requirements		
PHOTO 1101 or PHOTO 1103 & PHOTO 1606	Foundations of Digital Photography Digital Photography and Digital Photographic Printing Workshop	3-4
PHOTO 1102	Foundations of Film Photography	3
PHOTO 1105	History of Photography	3
PHOTO 1200	Photographic Composition, Color, and Concept	3
PHOTO 1201	Tools and Techniques for Digital Photography	3
PHOTO 1300	Studio Photography 1	3
PHOTO 1402	Introduction to Video for Photographers	3
PHOTO 2700	Professional Photographic Practices	3
PHOTO 2750	Portfolio Presentation	3
Program Emphases Courses		
Select three of the following		9
PHOTO 2002	Product Photography	
PHOTO 2004	Fashion and Commercial Photography on Location	
PHOTO 2006	Studio Fashion and Commercial Portraiture Photography	
PHOTO 2008	Wedding and Family Portraiture	
PHOTO 2010	Food Photography	
PHOTO 2012	Architectural Photography	
PHOTO 2100	Extended Photographic Project	
PHOTO 2282	Time Based Media II	
PHOTO 2300	Studio Photography 2	
Program Electives		
Select 10 credits from PHOTO courses ¹		10
Total Credits		46-47

¹ In addition to the courses listed above.

Photography Technology, A.A.S.

The **Photography Technology degree** is designed to provide students with a broad working knowledge of the history, art, and techniques of photography. Students will learn both the foundational analog and digital skills needed to produce, compose, light, edit, print, and archive high quality images. This degree requires 64-69 credits in program requirements, program electives, and general education in the courses listed below.

For more information about Photography, please visit the program page (<http://www.cod.edu/photography/>).

Degree Requirements

Field of Study Code: PHOTO.AAS.TECH

Code	Title	Credits
Program Requirements		
PHOTO 1101 or PHOTO 1103 & PHOTO 1606	Foundations of Digital Photography Digital Photography and Digital Photographic Printing Workshop	3-4
PHOTO 1102	Foundations of Film Photography	3
PHOTO 1105	History of Photography	3
PHOTO 1200	Photographic Composition, Color, and Concept	3
PHOTO 1201	Tools and Techniques for Digital Photography	3
PHOTO 1300	Studio Photography 1	3
PHOTO 1402	Introduction to Video for Photographers	3
PHOTO 2700	Professional Photographic Practices	3
PHOTO 2750	Portfolio Presentation	3
Emphasis Requirements		
Select three of the following ¹		9
PHOTO 2002	Product Photography	
PHOTO 2004	Fashion and Commercial Photography on Location	
PHOTO 2006	Studio Fashion and Commercial Portraiture Photography	
PHOTO 2008	Wedding and Family Portraiture	
PHOTO 2010	Food Photography	
PHOTO 2012	Architectural Photography	
PHOTO 2100	Extended Photographic Project	
PHOTO 2282	Time Based Media II	
PHOTO 2300	Studio Photography 2	
Program Electives		
Select 10 credits from PHOTO courses ¹		10
General Education		
Select 18 to 22 credits ¹		18 - 22
Total Credits		64-69

¹ In addition to the course listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Physical Education, Fitness, and Sports Studies

Area of Study

For more information about Physical Education, Fitness, and Sports Studies, please visit the program page (<http://www.cod.edu/phys-ed/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Fitness Instructor, Certificate (p. 145)
- Kinesiology and Fitness Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/physical-education/kinesiology-fitness-track-transfer-pathway-aa/>)
- Kinesiology and Fitness Transfer Pathway, A.S. (<https://catalog.cod.edu/programs-study/physical-education/kinesiology-fitness-track-transfer-pathway-as/>)
- Physical Education Teaching and Coaching Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/physical-education/coaching-transfer-pathway-aa/>)
- Sports Management Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/physical-education/sports-management-transfer-pathway-aa/>)

Fitness Instructor, Certificate

The **Fitness Instructor certificate** program is designed to provide students with a comprehensive background in kinesiology and exercise programming that leads to a nationally accredited personal training and/or group fitness certification.

Once certified as a personal trainer and/or group fitness instructor, students are eligible for employment at local health clubs, community centers, park districts, and other fitness-related facilities.

For more information about Physical Education, Fitness, and Sports Studies, please visit the program page (<http://www.cod.edu/phys-ed/>).

Certificate Requirements

Field of Study Code: PHYS.CER.FITN

Code	Title	Credits
Program Requirements		
PHYS 2258	The Science of Nutrition	3
PHYS 2261	Applied Kinesiology	3
PHYS 2263	Fitness Instructor Training	3
<i>Select one course from each of the following areas:</i>		
Resistance Training Coursework		1
PHYS 1141	Cross Training I	
PHYS 1171	Weight Training I	
PHYS 1184	Body Sculpting I	
PHYS 1191	Power Lifting I	
Mind-Body Coursework		1
PHYS 1778	Relaxation & Meditation Techniques	
PHYS 1901	Hatha Yoga I	
PHYS 1904	Gentle Yoga I	
PHYS 1908	Vinyasa Flow Yoga I	
PHYS 1911	Pilates I (Mat)	
PHYS 1921	Power Yoga I	
Group Exercise Coursework		1
PHYS 1123	Boot Camp Fitness I	
PHYS 1131	Cardio Kickboxing I	
PHYS 1181	Spinning I	
PHYS 1421	Water Aerobics I	
PHYS 1603	Zumba I	
Elective Coursework		

Select nine credit hours of elective coursework		9
PHYS 1500	Performance Nutrition	
PHYS 1555	Personal Fitness Program	
PHYS 1554	Healthy Eating	
PHYS 1556	Stress Management	
PHYS 2200	Introduction to Physical Education, Exercise Science, and Sport	
PHYS 2202	Introduction to Sport Management	
PHYS 2240	Introduction to Sport Psychology	
PHYS 2251	Living With Health	
PHYS 2254	First Aid and CPR	
PHYS 2270	Introduction to Sports Marketing	
ANAT 1500	Survey of Human Anatomy and Physiology	
BUSIN 1161	Entrepreneurship	
MANAG 2210	Principles of Management	
MARKE 2210	Principles of Marketing	
Total Credits		21

¹ Elective coursework can be a combination of lecture and activity classes. This includes activity classes listed in the required section (not already taken as a requirement) and/or approved by a faculty advisor. Only two additional activity classes can be taken as part of the elective coursework.

Electives

Physical Therapist Assistant

Area of Study

For more information about Physical Therapist Assistant, please visit the program page (<http://www.cod.edu/pta/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Physical Therapist Assistant, A.A.S. (p. 145)

Physical Therapist Assistant, A.A.S.

The Physical Therapist Assistant program prepares students to provide skilled direct patient care under the direction and supervision of a licensed physical therapist. Students will acquire the skills necessary to help alleviate pain, improve strength and mobility, and facilitate patients' attainment of maximum function. Physical therapist assistants are employed in a variety of settings including hospitals, rehabilitation centers, long-term care facilities, sports medicine clinics and home health care agencies. Upon successful completion of the program, students are eligible to take the Physical Therapist Assistant (PTA) licensure exam. Upon passing the PTA licensure exam, the graduate can practice as a Physical Therapist Assistant. The Physical Therapist Assistant program is accredited by the Commission on Accreditation in Physical Therapy

Education (CAPTE). This degree requires a minimum of 67.5 credits in program requirements and general education in the courses listed below.

For more information about Physical Therapist Assistant, please visit the program page (<http://www.cod.edu/pta/>).

This degree requires program application and admission; please visit the above link for details.

Degree Requirements

Field of Study Code: PHYTA.AAS

Code	Title	Credits
Program Requirements		
PHYTA 1100	Introduction to Physical Therapy	2
PHYTA 1109	Basic Health Care Skills and Principles of Soft Tissues Techniques	3
PHYTA 1114	PTA Total Patient Care	1
PHYTA 1205	PTA Kinesiology	5
PHYTA 1207	PTA Pathophysiology	2
PHYTA 1211	PTA Therapeutic Assessment & Basic Intervention	4
PHYTA 1301	PTA Therapeutic Modalities	4
PHYTA 2103	PTA Neuromuscular and Cardiopulmonary Rehabilitation	4
PHYTA 2104	PTA Special Patient Populations	3
PHYTA 2110	PTA Documentation	1.5
PHYTA 2112	PTA Advanced Orthopedic Rehabilitation	4
PHYTA 2122	PTA Clinical Practicum I	1.5
PHYTA 2214	PTA Professional Issues	1
PHYTA 2223	PTA Clinical Practicum II	2.5
PHYTA 2224	PTA Clinical Practicum III	3
ANAT 1551 & ANAT 1552 or ANAT 1571 & ANAT 1572	Human Anatomy and Physiology I and Human Anatomy and Physiology II and Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	8
ENGL 1101	English Composition I	3
HLTHS 1110	Biomedical Terminology	3
Select one of the following:		3
SPEEC 1100	Fundamentals of Speech Communication	
SPEEC 1120	Small-Group Communication	
SPEEC 1150	Introduction to Business Communication	
General Education		
Select 9 to 11 credits ¹		
Mathematics (1100 or above)		3-5
Social & Behavioral Sciences		3
Humanities & Fine Arts		3
Total Credits		67.5-69.5

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Radiation Therapy

Area of Study

For more information about Radiation Therapy, please visit the program page (http://www.cod.edu/radiation_therapy/).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Radiation Therapy, Certificate (p. 146)

Radiation Therapy, Certificate

Upon successful completion of the Radiation Therapy certificate, students are eligible to become certified by the American Registry of Radiologic Technologists and practice as Radiation Therapy Technologists. Certification is through the American Registry of Radiologic Technologists (ARRT), licensure is required for employment in the field in the state of Illinois through the Illinois Emergency Management Agency (IEMA). This certificate requires 39 credits in the courses listed below.

For more information about Radiation Therapy, please visit the program page (<http://www.cod.edu/academics/programs/radiation-therapy/>).

This certificate requires program application and admission; please visit the above link for details.

Certificate Requirements

Field of Study Code: RATH.CER

Code	Title	Credits
RATH 2301	Principles and Practice of Radiation Therapy I	4
RATH 2302	Principles and Practice of Radiation Therapy II	4
RATH 2303	Principles and Practice of Radiation Therapy III	4
RATH 2310	Radiation Therapy Physics	3
RATH 2311	Radiation Biology and Protection	4
RATH 2312	Quality Management in Radiation Therapy	3
RATH 2321	Cross-Sectional Anatomy	2
RATH 2322	Pathophysiology for Radiation Therapy	3
RATH 2323	Operational Issues in Radiation Therapy	3
RATH 2331	Clinical Practice I	3
RATH 2332	Clinical Practice II	3
RATH 2333	Clinical Practice III	3
Total Credits		39

Respiratory Care

Area of Study

For more information about Respiratory Care, please visit the program page (<https://www.cod.edu/academics/programs/respiratory-care/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Respiratory Care, A.A.S. (p. 147)

Respiratory Care, A.A.S.

The Respiratory Care program prepares eligible students to provide management of respiratory care to patients seen in hospitals, intensive care units, emergency rooms, and diagnostic laboratories. Instructors educate students in diagnostic, therapeutic, and technologic arts as applied to the adult, neonatal, and pediatric patient. Upon successful completion of the program, students are eligible to take the following certification exams administered by the National Board for Respiratory Care: Certified Respiratory Therapist (CRT) and Registered Respiratory Therapist (RRT). Students who earn the Certified Respiratory Therapist (CRT) credential may apply for a Respiratory Care Practitioner license in the State of Illinois. This degree requires a minimum of 64 credits in program requirements and general education in the courses listed below.

For more information about Respiratory Care, please visit the program page (<https://www.cod.edu/academics/programs/respiratory-care/>).

This degree requires program application and admission; please visit the above link for details.

Degree Requirements

Field of Study Code: RESP.AAS.RC

Code	Title	Credits
Program Requirements		
RESP 1101	Basic Respiratory Care	3
RESP 1102	Intermediate Respiratory Care	3
RESP 1103	Advanced Respiratory Care	3
RESP 1105	Respiratory Assessment and Procedures	4
RESP 1111	Clinical Practice I	2
RESP 1113	Intensive Respiratory Care Clinical Practice	1
RESP 1120	Applied Cardiopulmonary Anatomy and Physiology	4
RESP 1121	Science for Respiratory Care	5
RESP 2201	Advanced Life Support, Monitoring, and Trends	4
RESP 2202	Pulmonary Function Testing	3
RESP 2205	Neonatal and Pediatric Intensive Respiratory Care	3
RESP 2206	Advanced Intensive Respiratory Care - Adult	2
RESP 2207	Advanced Intensive Respiratory Care - Neonatal-Pediatric	1
RESP 2250	Respiratory Care Board Review	4
RESP 2280	Advanced Clinical Assessment and Protocol	4
General Education		
Select 18 to 22 credits from the following:		18-22

Physical and Life Sciences – must be Biology¹ Chemistry, or Anatomy and Physiology²

MATH 1102 Mathematics for Health Sciences (or higher)²

All other AAS General Education requirements

Total Credits

64-68

¹ Excluding BIOLO 1110 Environmental Biology.

² Must have a B or higher.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Sociology

Area of Study

For more information about Sociology, please visit the program page (<http://www.cod.edu/sociology/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Sociology Transfer Pathway, A.A. (<https://catalog.cod.edu/programs-study/sociology/sociology-transfer-pathway-aa/>)

Speech Language Pathology

Area of Study

For more information about Speech Language Pathology, please visit the program page (<http://www.cod.edu/slpa/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Speech-Language Pathology Assistant, A.A.S. (p. 147)

Speech-Language Pathology Assistant, A.A.S.

The Speech Language Pathology Assistant (SLPA) program prepares students for employment as support personnel under the supervision of a certified Speech Language Pathologist in schools and clinics. Upon successful completion of the program, students are eligible to apply for the Illinois State License licensure through Illinois Department of Financial and Professional Regulations (IDFPR). This degree program requires a minimum of 64 hours in program requirements, electives and general education in the courses listed below.

For more information about Speech Language Pathology, please visit the program page (<http://www.cod.edu/slpa/>).

This degree requires program application and admission; please visit the above link for details.

Degree Requirements

Field of Study Code: SLPA.AAS

Code	Title	Credits
Program Requirements		
SLPA 1101	Introduction to Communication Disorders	4
SLPA 1105	Phonetics and Phonology	3
SLPA 1106	Speech Disorders and Intervention Across the Lifespan I	4
SLPA 1107	Speech Disorders and Intervention Across the Lifespan II	2
SLPA 1109	Language Development	3
SLPA 1110	Language Disorders and Intervention Across the Lifespan	4
SLPA 1112	Introduction to Audiology	2
SLPA 2101	Clinical Methods and Documentation	4
SLPA 2102	Professional Issues and the SLPA	4
SLPA 2104	Augmentative & Alternative Communication	3
SLPA 2112	Clinical Practicum	6
Electives		
Select seven credits from any 1000- or 2000-elective courses ¹		7
General Education		
Select 18 to 22 credits ¹		18-22
Total Credits		64-68

¹ In addition to the courses listed above.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Surgical First Assistant

Area of Study

For more information about Surgical First Assistant, please visit the program page (https://cod.edu/academics/programs/surgical_assistant/).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Surgical First Assistant, Certificate (p. 148)

Surgical First Assistant, Certificate

The Surgical First Assistant Certificate will prepare students to assist the surgeon in surgical operations safely and expeditiously. The program

provides advancement opportunities for Certified Surgical Technologist through a variety of instructional methods including online, laboratory, and clinical experience. Eligible students will be prepared to take a national certification exam. This certificate requires 35 credits in the courses listed below.

For more information about Surgical First Assistant, please visit the program page (<https://cod.edu/surgical-assistant/>).

Certificate Requirements

Field of Study Code: CSFA.CER

Code	Title	Credits
CSFA 2501	Surgical First Assistant Principles I	9
CSFA 2502	Surgical Laboratory Practicum	6
CSFA 2503	Surgical First Assistant Principles II	13
CSFA 2504	Surgical First Assistant Principles III	7
Total Credits		35

Surgical Technology

Area of Study

For more information about Surgical Technology, please visit the program page (<http://www.cod.edu/surgtech/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- Surgical Technology, A.A.S. (p. 148)

Surgical Technology, A.A.S.

The Surgical Technology Program prepares competent entry-level surgical technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. The curriculum incorporates the Commission of Accreditation for Allied Health Education Programs (CAAHEP) professional standards, guidelines, and competencies needed for surgical technology employment. Students must complete all courses in this program with a grade of C or higher.

For more information about Surgical Technology, please visit the program page (<http://www.cod.edu/surgtech/>).

Degree Requirements

Field of Study Code: SURGT.AAS

Complete the following courses with a grade of "C" or higher.

Code	Title	Credits
Program Requirements		
CSPD 1111	Central Sterile Processing and Distribution	3
CSPD 1211	Central Sterile Processing and Distribution Practicum	3
SURGT 1001	Surgical Asepsis and Sterile Technique	4
SURGT 1101	Surgical Health and Technological Sciences	3

SURGT 1102	Surgical Technology Skills	3
SURGT 1201	Surgical Technology Concepts	3
SURGT 1202	Surgical Technology Practicum I	3
SURGT 1301	Surgical Pathophysiology and Patient Procedures I	3
SURGT 1302	Surgical Technology Practicum II	3
SURGT 1401	Surgical Pathophysiology and Patient Procedures II	3
SURGT 1402	Surgical Technology Practicum III	3
SURGT 1500	Professional Practice	4

General Education

Select any applicable courses to the AAS degree from the following categories:

Communications		6
Physical/Life Science		
ANAT 1551 & ANAT 1552 or ANAT 1571 & ANAT 1572	Human Anatomy and Physiology I and Human Anatomy and Physiology II and Anatomy and Physiology With Cadaver I and Anatomy and Physiology With Cadaver II	8
HLTHS 1110	Biomedical Terminology (Contemporary Life Skill)	3
Humanities		
SURGT 1000	Ethical Considerations in the Health Care Industry	3
Social and Behavioral Sciences		3
Mathematics ¹		3-5
Total Credits		64-66

¹ For this degree, this may include MATH 1102 Mathematics for Health Sciences, MATH 1104 Mathematics for Horticulture, or MATH 1120 Mathematical Foundations for Diagnostic Medical Imaging Sonographers.

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Welding Technology

Area of Study

For more information about Welding Technology, please visit the program page (<http://www.cod.edu/welding/>).

Degrees, Certificates, and Transfer Pathways

The following is an overview of program requirements and program maps.

- AWS Sense 1, Certificate (p. 149)
- Welding Technology, A.A.S. (p. 149)
- Welding, Certificate (p. 150)

AWS Sense 1, Certificate

Theory and practice in the preparation and welding of steel joints in various positions. Safety, electrode selection, inspection, and testing using shielded metal, gas tungsten, flux core, and gas metal arc welding. Skills are developed in producing different position butt and fillet welds. American Welding Society (AWS) testing is emphasized. The **AWS Sense 1 certificate** requires 17 credits in the courses listed below.

For more information about Welding Technology, please visit the program page (<http://www.cod.edu/welding/>).

Certificate Requirements

Field of Study Code: WELD.CER.AWS

Code	Title	Credits
WELD 1100	Welding I	3
WELD 2000	Introduction to AWS Level 1	2
WELD 2001	Aws Level 1-SHIELDED Metal Arc Welding (SMAW)	3
WELD 2002	AWS Level 1 Gas Tungsten Arc Welding (GTAW)	3
WELD 2003	AWS Level 1 Flux Core Arc Welding (FCAW)	3
WELD 2004	AWS Level 1 Gas Metal Arc Welding (GMAW)	3
Total Credits		17

Welding Technology, A.A.S.

The Welding Technology program will provide students with the theory and practice in entry-level welding skills. Upon successful completion of the program, students will be prepared for the American Welding Society (AWS) examinations.

For more information about Welding Technology, please visit the program page (<http://www.cod.edu/welding/>).

Degree Requirements

Field of Study Code: WELD.AAS

Code	Title	Credits
Program Requirements		
WELD 1100	Welding I	3
WELD 1112	Oxy-Fuel, Welding, Plasma Cutting and Brazing	3
WELD 1122	Shielded Arc Welding (SMAW)	3
WELD 1132	Metal Inert Gas (MIG) Carbon Steel Welding	3
WELD 1142	Gas Tungsten Arc (TIG)	3
WELD 1151	Pipe Welding and Fabrication	3
WELD 1160	Skill Assessment	3
WELD 2000	Introduction to AWS Level 1	2
WELD 2001	Aws Level 1-SHIELDED Metal Arc Welding (SMAW)	3
WELD 2002	AWS Level 1 Gas Tungsten Arc Welding (GTAW)	3
WELD 2003	AWS Level 1 Flux Core Arc Welding (FCAW)	3

WELD 2004	AWS Level 1 Gas Metal Arc Welding (GMAW)	3	WELD 2000	Introduction to AWS Level 1	2
MANUF 1101	Industrial Design/CAD	3	MANUF 1101	Industrial Design/CAD	3
MANUF 1151	Machine Shop I	3	MANUF 1151	Machine Shop I	3
Program Electives			Total Credits		
Select at least five credits from any 1000 or 2000 level Welding course not listed in program requirements or from these courses:		5			
ELMEC 1171	Introduction to Robotic Technology				
HVACR 1161	Introduction to Sheet Metal				
MANUF 1121	Physical Metallurgy				
MANUF 2280	Industrial Safety				
WELD 1134	Gas Metal Arc Welding (GMAW) Aluminum Welding				
WELD 1136	Gas Metal Arc Welding (GMAW) Stainless Steel				
WELD 1138	Gas Metal Arc Weld (GMAW) Bronze				
WELD 1144	Gas Tungsten Arc Welding (GTAW) Aluminum				
WELD 1146	Gas Tungsten Arc Welding (GTAW) Stainless Steel				
General Education					
In addition to the classes listed above complete 18 hours of general education requirements.		18			
Total Credits		64			

General Education Requirements

For general education requirements for the A.A.S. degree, please visit the A.A.S. degree catalog page (p. 37).

Welding, Certificate

The Welding Certificate provides a competency-based method of instruction in the four most common methods of metal joining: Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), Oxy-Fuel Welding (OFW), and Gas Metal Arc Welding (GMAW). American Welding Society testing standards are used.

For more information about Welding Technology, please visit the program page (<http://www.cod.edu/welding/>).

Certificate Requirements

Field of Study Code: WELD.CER

Code	Title	Credits
Program Requirements		
WELD 1100	Welding I	3
WELD 1112	Oxy-Fuel, Welding, Plasma Cutting and Brazing	3
WELD 1122	Shielded Arc Welding (SMAW)	3
WELD 1132	Gas Metal Arc Welding (GMAW) Carbon Steel Welding	3
WELD 1142	Gas Tungsten Arc Welding (GTAW)	3
WELD 1151	Pipe Welding and Fabrication	3
WELD 1160 or WELD 1165	Skill Assessment Blueprint Reading and Fabrication	3

ACADEMIC DIVISIONS, PROGRAMS AND SPECIAL POPULATIONS

Academic Affairs

Learning Technologies

Learning Technologies' goal is to provide instructional design and LMS technology support to the faculty at College of DuPage. Further, it is to introduce our faculty colleagues to innovative uses of LMS technology and other learning technology tools that will improve student success, academic excellence, and enhance the student experience in their educational pursuits. Additionally Learning Technologies continually researches and develops training opportunities regarding the use of current and emerging LMS technologies for use in higher education in the, online, hybrid, and face-to-face modalities of instruction. Our aim is to support the college's mission of academic excellence and student success through collaborative and innovative actions.

Remote Learning Options

In addition to in-person courses, COD offers two other remote learning options to fit your schedule: online (NET) courses, hybrid (HYB) courses and virtual classroom meetings (VCM).

Online (NET) Courses

NET courses are taught completely online and follow instructor timelines with interaction occurring mostly through discussion boards and written messages. All assignments are submitted online.

Hybrid (HYB) Courses

HYB courses are a variation of online and in-person learning. Students meet on-campus for labs, studios or clinical work, but have additional required learning to be completed online.

Virtual Classroom Meeting (VCM) Courses

With VCMs, students meet in real-time on specified days and times as they normally would in-person, but the class is completely online. The use of video chat software allows students regular face-to-face contact, but in a virtual format.

For more information about remote learning options, please visit Online Class Formats (<https://www.cod.edu/academics/online/online-class-formats/>).

Field and Experiential Learning/Study Abroad/Global Education

Field and Experiential Learning/Study Abroad courses include field-based, hands-on experiences that complement classroom curriculum. Courses take students out of the classroom to a variety of destinations locally, throughout the United States and around the world. Global Education serves the international and multicultural interests of the College through faculty and curriculum development, global organizations and cultural events. For more information about Field and Experiential Learning/Study Abroad/Global Education, contact (630) 942-2356 or visit Field Studies (https://www.cod.edu/academics/academic_opportunities/field/).

Honors Program

The College of DuPage Honors Program offers academically ambitious students courses that emphasize critical and creative thinking, providing

students with opportunities to delve deeper into course materials and gain insight through lively classroom discussions in an enriched learning environment. The Honors Program is designed for new and current College of DuPage students who are highly motivated, enjoy learning and want to be part of a community through classes and extracurricular activities.

For more information, visit [cod.edu/honors](https://www.cod.edu/honors/) (<https://www.cod.edu/honors/>).

Workforce Development

Workforce Development efforts at College of DuPage are comprehensive and integrated into how the institution serves students and communities in District 502. It is directly tied to the mission of the College through guiding principles and institutional priorities related to access, affordability, workplace readiness, career and technical education, community development and obtaining skills associated with cutting-edge technology. The College establishes and maintains positive working relationships and partnerships with area employers, non-profit agencies, industry and trade associations, school districts, and colleges and universities.

Workforce Development educational opportunities and support services are focused on the needs of unemployed/underemployed residents in the area, as well as those seeking new careers that require a college degree, certificate, specialized short-term training, or industry recognized credential. Services also assist with the financial assistance process through the Workforce Innovation and Opportunities Act (WIOA) grant offered by DuPage County's local One-Stop, workNet DuPage Career Center.

College of DuPage is a proud partner of the workNet DuPage Career Center. The Center houses representatives from multiple agencies to assist the unemployed/underemployed job seeker. Workforce Development services are located at the One-Stop Center at 2525 Cabot Drive #302 in Lisle, (630) 942-2389.

For more information, please visit the Workforce Development Services page (https://www.cod.edu/academics/academic_opportunities/workforce_development/).

High School Equivalency (HSE) Testing

College of DuPage is the official site for administration of the High School Equivalency (HSE) Tests for DuPage County residents. HSE Testing offers adults who have not completed high school the opportunity to take the HSE Tests and earn the Illinois High School Equivalency Certificate from the State of Illinois. For more information or to register to take the HSE Tests, visit the HSE webpage (<https://cod.edu/academics/testing/hse-testing.aspx>). No formal preparation is required to take the HSE Tests; however, individuals may take HSE preparation courses through the College. For information about preparation courses, contact Continuing Education at (630) 942-3697 or visit cod.edu/hse (<https://cod.edu/hse/>).

Tutoring and Academic Support Center

The Tutoring and Academic Support Center consists of Tutoring Services, the Math Assistance Area, and Writing, Reading, and Speech Assistance. COD placement test preparation resources and info sessions are available, as well as Blackboard and myACCESS support. Services are free of charge to COD students who seek to maintain or improve their grades, have difficulty completing their coursework, or need extra support.

The off-campus Tutoring and Academic Support Centers in the Addison, Carol Stream, Naperville and Westmont centers provide testing services, digital library resources and a student computer lab. At these locations, students can meet with an instructor, work independently or collaborate in small groups on projects in a one-stop environment.

The Learning Commons are open every day (includes evening and weekend hours) at the following locations:

Tutoring and Academic Support Center—Glen Ellyn

425 Fawell Blvd.
Student Resource Center (SRC), Room 2102
Glen Ellyn, IL 60137-6599
(630) 942-3940

Addison Center Tutoring and Academic Support Center

301 S. Swift Road
Addison, IL 60101
(630) 942-4650

Carol Stream CENTER Tutoring and Academic Support Center

500 Kuhn Road
Carol Stream, IL 60188
(630) 942-4900

Naperville CENTER Tutoring and Academic Support Center

1223 Rickert Drive
Naperville, IL 60540-0954
(630) 942-4750

Westmont CENTER Tutoring and Academic Support Center

650 Pasquinelli Drive
Westmont, IL 60559-1252
(630) 942-4850

McAninch Arts Center

The McAninch Arts Center (MAC) at College of DuPage presents more than 300 events annually and home of the Cleve Carney Museum of Art, two award-winning professional companies in residence, New Philharmonic Orchestra and the Buffalo Theatre Ensemble, and to the academic programs of Music, Theater and Dance. The MAC presents an annual performance series of international and national touring artists, gallery openings, Visiting Artist Lectures, and an International Film Series. The facility is the preeminent regional center for arts education and presentation in the district and features a world-class contemporary Art Gallery, Belushi Performance Hall (820 seats), the Playhouse Theatre (200 seats), Studio Theatre (80 seats), a 2,500-seat outdoor Lakeside Pavilion, and state-of-the-art classrooms and art studios.

Since opening its doors in October 1986, the McAninch Arts Center has been focused on enriching the community with paid and free world-class entertainment opportunities that go beyond the stage, through community engagement, a free summer Lakeside series, education programs, pre-performance lectures, classes with visiting artists and events for K-12 schoolchildren. The MAC provides residents with interactive arts experiences that engage, enlighten and entertain. The MAC prides itself on booking artists who are willing to offer master classes that allow COD students a rare and unique intimate learning experience with artists including Savion Glover or the composer of *Wicked*, Steven Schwartz.

This commitment to increasing community access to the arts has earned the McAninch Arts Center the Illinois Arts Council's Partners in Excellence designation, which recognizes 40 of the most significant cultural

institutions in the state. For more information, call (630) 942-3008 or visit [atthemac.org](https://www.atthemac.org) (<https://www.atthemac.org/>).

Testing Center

The Testing Center provides both academic and specialized testing to assist College of DuPage students and community members. The Academic Testing department administers placement tests, classroom tests, and online course tests, as well as the TABE test, Health Science program entrance exams, and career interest and personality inventory tests. The Specialized Testing department administers the High School Equivalency Tests, proctored exams and high-stakes certification exams, including Pearson Vue, PSI, CLEP, WorkKeys and Scantron. Many testing services are also offered at College of DuPage centers. For more information, contact (630) 942-2400 or visit cod.edu/testing (<https://www.cod.edu/testing/>).

Library

The Library (<https://library.cod.edu/>) is a central hub for academic support, research, and student success, offering a wide range of resources and services designed to meet the needs of the college community both on campus and online. It is open seven days a week when classes are in session with reduced hours over semester breaks. Library faculty and staff are available in person, or by phone, email or live chat to help with research strategies, database navigation, and citation support. The Library offers workshops and instructional sessions to strengthen students' academic research skills and hosts an annual Library Student Research Symposium to celebrate excellence in student research.

Students have access to over half a million books, eBooks, journals, streaming content, and multimedia materials across all subject areas. Special collections include career and college information, philanthropy, anatomy models, and the College Archive. Through the website, students can access online resources and research guides, reserve a study room or Media Lab workstation, and make a research appointment with a librarian.

The Library offers a comfortable environment with collaborative, quiet, and silent study zones, and students can reserve technology-equipped study rooms for individual or group use. Students can check out laptops for short-term or semester-long loan and borrow calculators, headphones, and other tech equipment. Computers with software to support academic programs and printing, copying and scanning services are also available. Students can cultivate their digital creation skillset in the Library Media Lab's audio and video recording booths and editing workstations. Equipment, such as audio and lighting kits, photo and video cameras, and iPads, is available for checkout. From providing a quiet place to study to expert assistance with research to robust collections, the library is here to support students' academic journey.

For more information, visit the Library in the Student Resources Center (SRC 2020), call (630) 942-2350, or visit library.cod.edu (<https://library.cod.edu/>).

Arts, Communication and Hospitality Division

Arts, Communication and Hospitality encompasses a broad range of arts courses and programs that provide students with an opportunity to create, perform, study and participate in the arts. The Arts, Communication and Hospitality division includes coursework, degrees and certificates in Architecture and Construction Management, Art

and Art History (Drawing, Painting, Computer Art, Ceramics, Jewelry, Printmaking, Sculpture, Time Arts), Cosmetology, Culinary Arts, Dance, Fashion Studies, Graphic Design and Interactive Media, Hospitality and Tourism, Interior Design, Motion Picture/Television (Animation), Music, Photography, Speech and Theater.

Students in Arts, Communication and Hospitality are provided opportunities to:

- employ a variety of media and processes as a means of personal and cultural expression;
- develop their understanding and perception of sensory materials and messages in creating, producing, displaying and interpreting works of communication and the cultural arts in a broad range of media;
- develop original ideas, tap creative impulses and stimulate the imagination;
- develop analytical and evaluative skills and the ability to articulate critical insights into various forms of cultural expression;
- participate in theater, music, film and dance in educational and public settings;
- study practical, commercial, historical, social and cultural contexts for communication and the cultural;
- study and employ appropriate tools, technologies, techniques and materials in the creation of communication and the cultural arts.

Faculty in Arts, Communication and Hospitality are working artists and performers, and those in the Applied Arts have industry experience. The faculty is committed to providing students with a full understanding of the arts and opportunities to participate in and perform in a broad range of student performance groups, including groups in music and theater, and in exhibiting work in the student art galleries and other venues on and off-campus.

For more information about Arts, Communication and Hospitality, call (630) 942-2048 or visit [cod.edu/academics/divisions/art-comm-hospitality/index.aspx](https://www.cod.edu/academics/divisions/art-comm-hospitality/index.aspx) (<https://www.cod.edu/academics/divisions/art-comm-hospitality/>).

Business and Applied Technology Division

Always aware of the current and emerging trends in business, industry and computer technology, the Business and Applied Technology Division prepares its students with the skills needed for immediate success in the job market and with a solid academic base for continuing their education at a degree-granting institution.

Faculty program chairs work closely with business and industry through professional networks and advisory committees to maintain current and relevant curricula. Faculty have real-world experience to bring to their classes, ensuring that students receive a strong education based on both theory and applied approaches to learning, career guidance and career skill development.

Business programs include Accountancy, Business, Management and Marketing, Office Technology and Paralegal Studies. Applied Technology programs include Computer and Information Technology, Computer and Information Science, Automotive Service Technology, Heating, Ventilation, Air Conditioning and Refrigeration, Horticulture, Manufacturing Technology and Welding.

Continuing Education and Public Services Division

Continuing Education/Public Services classes are offered on campus in Glen Ellyn and at more than 45 off-campus sites, including College of DuPage Centers, high schools, local businesses and other convenient locations throughout District 502. Through innovative lifelong learning opportunities, beginning at kindergarten and journeying through every phase of life, Continuing Education delivers a diverse range of content-rich courses and programs for a broad set of learners: K to 12 students, area professionals and businesses, law enforcement, public service employees, and community members of all abilities, ages and interests.

Flexible class formats, convenient schedules and varied pricing allow Continuing Education to increase accessibility to education by catering offerings to the ever-evolving needs of students. Whether students seek personal enrichment or professional development, Continuing Education seeks to remove obstacles and clear the path toward new goals.

Continuing Education is dedicated to the non-traditional student, with an emphasis on connecting learning experiences and exploring career pathways. By connecting a diverse community of learners to the College, Continuing Education brings together individuals, professionals, companies, municipalities and organizations in support of educational opportunities that improve quality of life and regional economic vitality.

For more information, contact the Continuing Education Division at (630) 942-2208 or visit cod.edu/conted (<https://cod.edu/conted/>).

Adult Enrichment

Adults of all ages can benefit from a diverse range of personal enrichment courses available through College of DuPage Continuing Education. Adult Enrichment courses are available in a variety of subject areas including art and music, finance and investment, health and wellness, history and humanities, hobby and recreation, home and garden, and computers. For the current Continuing Education Schedule of Classes, visit cod.edu/conted (<https://cod.edu/conted/>).

Lifelong Learning Program

Offering classes designed for students over the age of 50, with extensive opportunities to learn new skills, pursue an interest and be part of a community of learners. Daytime and evening courses, special events, Lunch Break Lectures and Sage Series presentations are offered at the Glen Ellyn campus and several other convenient locations. A reduced fee applies for those 55 years and older. For more information, visit cod.edu/lifelong (<https://cod.edu/lifelong/>).

Developmental Adult Enrichment Program

Specialized courses are available for adults with developmental disabilities that help build academic, social and everyday living skills. To learn more about individual programs, visit cod.edu/vocational (<https://cod.edu/vocational/>) or call (630) 942-2208.

Vocational Skills

These workplace-oriented courses are developmental-level, non-credit courses designed to develop skills that can lead to competitive, entry-level employment and enhance everyday living skills.

Developmental Literacy

In a small-group setting based on ability level, students develop reading and writing skills and have the opportunity to advance through the

classes. These courses complement other offerings within College of DuPage.

COACH (Career Opportunity ACHievement)

COACH is a two-year cohort program for adults with intellectual or developmental disabilities. In addition to an academic focus on reading, writing, math and computer literacy, COACH also promotes social skills, independence and career exploration. Visit cod.edu/COACH (<https://cod.edu/COACH/>) for more details.

English Language Acquisition (ELA), Adult Basic Education (ABE), and High School Equivalency (GED®) Preparation

Adult Education Program

Tuition-free Adult Education classes are funded by state and federal grants. Adult Education classes assist adults in becoming literate; obtaining knowledge and skills necessary for employment and self-sufficiency; gaining the skills necessary to become full partners in the education of their children; and completing their secondary school education. College of DuPage prepares Adult Education students for success in higher education and the workplace. For more information, visit [cod.edu/adult_education](https://www.cod.edu/adult_education/) (https://www.cod.edu/adult_education/).

Eligible participants in the program are adults who:

- are not enrolled or required to be enrolled in secondary school and who lack sufficient mastery of basic educational skills to function effectively in society;
- do not have a secondary school diploma or its recognized equivalent and have achieved an equivalent level of education; or
- are unable to speak, read or write the English language.

English Language Acquisition (ELA)

Tuition-free Adult English Language Acquisition (ELA) classes serve adults whose first or primary language is not English and who wish to understand, speak, read and write English for everyday use, to gain employability skills, or transition to college-level coursework. Beginning through advanced-level courses are offered at locations throughout the district. This program helps adults engage more fully in the community, workplace and academic environments by improving their English skills. For more information, call (630) 942-3697 or visit [cod.edu/ELA](https://www.cod.edu/ELA/) (<https://www.cod.edu/ELA/>).

Adult Literacy and Basic Education

Tuition-free Adult Basic Education (ABE) courses serve adults who do not have a high school diploma and who need to develop basic reading, spelling, grammar, writing, math or problem-solving skills. Adults reading below ninth-grade level are advised to begin their high school equivalency preparation here. For more information, call (630) 942-3697.

High School Equivalency (GED®) Preparation

Tuition-free high school equivalency courses serve adults who lack a U.S. high school diploma, have a ninth-grade reading level and need to prepare to take the GED® test to earn a High School Equivalency certificate. Instruction is offered in the six areas covered on the GED® Test: Reading, Writing, Mathematics, Science, Social Studies, and the U.S. and Illinois Constitutions. Students also prepare to write the required essay. Instruction is available in English or Spanish. Online courses, delivered in English, are also available. For more information, call (630) 942-3697 or visit cod.edu/hse (<https://cod.edu/hse/>).

Integrated Career and Academic Preparations System (ICAPS)

Through the tuition-free ICAPS program, students prepare for high-demand jobs by earning certifications in Information Technology or Manufacturing while earning high school equivalency. For more information, visit [cod.edu/ICAPS](https://www.cod.edu/ICAPS/) (<https://www.cod.edu/ICAPS/>).

U.S. Citizenship

This tuition-free course serves adults who are preparing to take the test for U.S. citizenship. It provides an overview of American history; federal, state and local government; U.S. customs, institutions, citizenship rights and responsibilities; and the Illinois and U.S. Constitutions. Instruction is restricted to English. For more information, call (630) 942-3697.

Professional Development

Professional development at College of DuPage offers highly focused, skills-based training in business, leadership, computers, healthcare, law enforcement, massage therapy, project management, real estate, transportation and logistics, and other key industries to prepare individuals to succeed in today's competitive job market. Customized training is available for area employers through Business Solutions and business development support is provided by the Business Development Center. Mentorship, guidance and support for developing and growing businesses are cultivated through COD's partnership with Innovation DuPage.

Business Solutions

Business Solutions programming is designed to meet the evolving needs of regional employers and employees by offering affordable, customized contract trainings, and online courses and training for industry-recognized skills and certifications. Business Solutions also offers training programs that are ideally suited for those who want specialized skills and knowledge for career advancement.

For more information, call (630) 942- 2770 or visit [cod.edu/bsolutions](https://www.cod.edu/bsolutions/) (<https://www.cod.edu/bsolutions/>).

Career Training

College of DuPage's Continuing Education division offers a variety of ways to change your career. Our career training programs provide individuals with short-term, flexible and professional instructors. Explore the Career Training programs in more detail by visiting cod.edu/conted (<https://cod.edu/conted/>) or call (630) 942-2208.

Innovation DuPage

Innovation DuPage (ID) is a nonprofit business incubator, accelerator and training center created by College of DuPage (COD). Through public-private collaboration, ID supports startups and young businesses, fosters student innovation and drives business growth in greater DuPage County. ID empowers entrepreneurs, inspires and informs regional businesses, and deepens collaboration between educational and governmental partners. Through focused mentoring, workshops, events and resource sharing, ID nurtures the entrepreneurs that drive innovation and create jobs. ID's full-service business incubator and accelerator, complete with co-working space, is housed in the Glen Ellyn Civic Center. For more information, call (630) 942-3340, email ID@InnovationDuPage.org or visit www.innovationdupage.org (<https://www.innovationdupage.org/>).

Business Development Center

The Center for Entrepreneurship provides free consulting, workshops and training through its three areas of expertise:

- The Small Business Development Center (SBDC) assists entrepreneurs and small business managers in the areas of business management, marketing, finance and operations, and assistance in

disaster preparedness, including business continuity and recovery planning.

- The Illinois Procurement Technical Assistance Center (IPTAC), is designed for increasing business with the government, or improving the current level of government contracting.
- The Illinois International Trade Center (ITC) offers free market research and consulting assistance to Illinois companies that are interested in exporting their products or services.

For more information, call (630) 942-2600, email bdc@cod.edu, or visit [cod.edu/business-development-center](https://www.cod.edu/business-development-center/) (<https://www.cod.edu/business-development-center/>).

Public Services

Homeland Security Training Institute (HSTI)

In September 2011, Continuing Education opened the state-of-the-art Homeland Security Education Center (HEC) as the cornerstone facility for the new Homeland Security Training Institute (HSTI). HSTI brings together experts from law enforcement, fire science, public safety, counterterrorism, private sector security, and emergency planning and disaster preparedness, for integrated professional development. The HEC offers the first in the nation non-military 4D indoor training complex; forensic, cyber and internet investigation labs; smoke, EMS and building construction labs; emergency operations center, and a mock courtroom. In 2015, construction was completed on the Homeland Security Training Center (HTC), which offers state-of-the-art first responder training simulators, a 911 call center training lab, a 24-position, 50-yard live tactical range, as well as multi-use classrooms to support HSTI programs and training courses.

Homeland Security Training Programs

The Homeland Security Training Institute (HSTI) at College of DuPage offers courses to serve the needs of the modern emergency planner and first responder. Programming is focused on education for law enforcement, fire science, first responders and corporate security personnel in the area of homeland security. Through a series of courses in program models such as law enforcement, disaster preparedness, counterterrorism, intelligence, emergency response, NIMS/ NRF/ICS, and private sector security, the HSTI continues to develop training programs for working professionals, as well as public safety programs for the community. In 2015, HSTI developed a comprehensive training program designed to meet the needs of law enforcement agencies. For more information about our exclusive membership program opportunities, please call (630) 942-3723 or visit [cod.edu/hsti](https://www.cod.edu/hsti/) (<https://www.cod.edu/hsti/>).

Suburban Law Enforcement Academy

The Suburban Law Enforcement Academy (SLEA) has been a leader in training law enforcement professionals since its inception in 1994. College of DuPage is home to one of only seven law enforcement academies in Illinois, and is fully accredited by the Illinois Law Enforcement Training and Standards Board (ILETSB). The Basic Academy is authorized by the ILETBSB to conduct the mandated 560-hour (14-week) Basic Law Enforcement Officers course four times per year. Upon completing the training, recruits are prepared to take the State of Illinois certification examination. For more information about Suburban Law Enforcement Academy programs and courses, please call (630) 942-2677 or visit [cod.edu/slea](https://www.cod.edu/slea/) (<https://www.cod.edu/slea/>).

Youth Education

College of DuPage youth education programs include year-round enrichment and reinforcement opportunities for children and youth from kindergarten through high school.

Youth Academy

The College of DuPage Youth Academy offers an extensive range of educational programs from elementary and middle school through high school and college preparation. This includes enrichment courses as well as academic programs to help students with advancement and recovery. College of DuPage Continuing Education also administers an extensive summer high school program. Youth Academy programs are designed to bridge learning and skill gaps between secondary and post-secondary schools, while allowing young adults to explore future career pathways.

The Youth Academy includes:

- Career Exploration
- College Preparation
- Computer and Technology Programs
- Counselor-in-Training Summer Camp
- Elementary, Middle School and High School Enrichment
- Explorer Summer Camp
- High School Credit - for Advancement and Recovery
- Music Lessons
- STEAM Programming
- Talent Search
- Teen Xtreme
- Test Preparation
- Tutoring and Music Lessons
- Youth Leadership Program

For more information about Youth Academy programs, call (630) 942-2208 or visit [cod.edu/youth](https://www.cod.edu/youth/) (<http://www.cod.edu/youth/>).

Liberal Arts Division

The Liberal Arts Division is comprised of the following disciplines: English, English Language Studies (ELS), History, Humanities, Interpreting, Languages including American Sign Language, Philosophy and Religious Studies.

English

English includes studies in Composition, Developmental Reading and Writing, Creative Writing, Technical and Professional Writing, Linguistics, Literature and Film. These disciplines provide an educational framework within which students develop their abilities to think critically and to express themselves clearly, effectively and creatively to different audiences. Many of the courses in English satisfy general education requirements for graduation and can be transferred to other institutions. Many courses also feature enriched learning experiences for students, including Honors courses, service learning projects, experiential learning and field-based research, peer mentoring opportunities, and extended learning communities. Students in English are provided educational opportunities to:

- develop a range of strategies for writing, reading, and listening more effectively;

- acquire critical information literacy skills, including the ability to locate, evaluate, and synthesize information from a variety of sources and for different purposes;
- nurture a deeper aesthetic awareness and the capacity for meaningful self-expression;
- cultivate their ability to think critically and to respond creatively to complex problems and situations;
- enhance their understanding of and respect for personal, social and cultural diversity;
- foster greater rhetorical awareness, including the ability to consider a variety of perspectives and audiences when communicating;
- explore a wide number of genres and styles in academic, professional, and public settings;
- understand and effectively use a range of technologies for researching and communicating in 21st century contexts.

English faculty sponsor student curricular activities, including Prairie Light Review and the Writers Read series. For more information, call (630) 942-2047 or visit [cod.edu/plr/](https://www.cod.edu/plr/) (<https://www.cod.edu/plr/>).

For more information, visit [cod.edu/english/](https://www.cod.edu/english/) (<https://www.cod.edu/english/>).

English Language Studies

English Language Studies (ELS) offers a series of tuition-based language courses that prepare non-native speakers of English for study at U.S. colleges and universities as well as for professional employment in the United States. The two primary goals of the courses are for students to acquire academic language proficiency and to develop intercultural communication competence. Students in English Language Studies are provided educational opportunities to:

- analyze a variety of authentic fiction and nonfiction texts;
- write for multiple academic and professional purposes;
- develop strategies for critical listening;
- lead and participate in class and small group discussions centered around complex academic topics;
- give engaging presentations for a variety of academic and professional purposes;
- acquire new vocabulary including idioms and common usage;
- learn and use strategies to improve language accuracy;
- demonstrate the ability to find and synthesize information as well as to appropriately cite all sources;
- view issues from multiple perspectives and analyze how those perspectives developed;
- practice cultural sensitivity and understand the value of diversity;
- apply techniques for promoting interpersonal, cultural, and linguistic communication as well as repair any breakdown in communication.

For more information, email Jill Granberry at granberr@cod.edu or visit [cod.edu/els/](https://www.cod.edu/els/) (<https://www.cod.edu/els/>).

Humanities

Humanities includes subject areas that address the question of what it means to be human. Subject areas in the Humanities include History, Humanities, Languages, Philosophy and Religious Studies. The study of Humanities frees students to think beyond personal and cultural boundaries and to consider informed actions that have constructive outcomes for the future. Many of the courses in Humanities satisfy the

general education requirements for graduation and can be transferred to other institutions.

Students in Humanities are provided educational opportunities to:

- develop skills in analysis, synthesis, and evaluation of readings and writings related to the Humanities;
- develop an understanding of history, philosophy, religious studies, the arts and cultural contexts;
- develop an awareness of human spiritual, intellectual, social and political aspirations;
- develop insight into various cultures through the study of history, world languages, the arts, philosophical and religious texts;
- develop creative and critical thinking skills.

Humanities faculty are committed to providing high quality educational and intellectual opportunities that challenge students to reflect critically on themselves and the world around them. Many courses also feature enriched learning experiences for students, including Honors courses, study abroad, service learning projects, experiential learning and field-based research, peer mentoring opportunities, and extended learning communities.

For specific information about History, Humanities, Languages, Philosophy and Religious Studies, call (630) 942- 2047 or visit cod.edu/liberal_arts/ (https://cod.edu/liberal_arts/).

Nursing and Health Sciences Division

Students graduating from one of the programs in the Health Sciences areas are prepared for direct entry into professional, semiprofessional, technical and skilled employment. Some students, however, elect to continue their education through articulated capstone programs at baccalaureate-degree granting colleges and universities either at the time of graduation or after several years of clinical practice.

Knowledge and skill requirements are constantly changing in the health sciences. The Nursing & Health Sciences programs keep pace with these changes through the work of expert faculty with work experience and professional degrees. The Nursing & Health Sciences division offers up-to-date technological resources, and the guidance of advisory committees comprised of representatives from business and industry, health and public service agencies, and institutions. Through these mechanisms, the division strives to advise students about current job requirements and labor market conditions, facilitate employment, and meet the diverse workforce needs of the College district.

Located in a state-of-the-art facility, the Health and Science Center houses classrooms and state of the art laboratories. Supervised clinical health care experiences are provided at area hospitals and clinics. Due to the prerequisite education required, as well as clinical resource availability, the college has a selective enrollment process for the following health care programs in the Nursing & Health Sciences Division: Dental Hygiene, Nursing, Sonography, Nuclear Medicine, Radiography, Radiation Therapy, Mammography, Speech Language Pathology Assistant, Physical Therapist Assistant, Magnetic Resonance Imaging, Respiratory Care and Surgical Technology. Candidates for the selective enrollment programs must submit a Healthcare Application, with an application fee, and meet admissions criteria beyond that required for enrollment at College of DuPage.

Other Health Sciences career programs, such as Central Sterile Processing Technician, Certified Nursing Assistant, Computed

Tomography, Eye Care Assistant, Ophthalmic Technician, Health Care Office Assistant, Medical Assistant, Long-Term Care Administration, Phlebotomy, Medical Billing, Non-Invasive EKG, Physician Coding, Patient Care Technician, Surgical Assistant and Vascular Sonography are open enrollment. While these programs do not require separate admission, they do require verification of program requirements prior to admission.

Group advising sessions are offered regularly for most of these programs. For assistance with advising and admissions questions, contact the Health Services Program Advising office at (630) 942-2259 or schedule an appointment by email at healthcareadvising@cod.edu. For more information, visit [cod.edu/admission/health-science](https://www.cod.edu/admission/health-science) (<https://www.cod.edu/hsadmissions/>).

Social/Behavioral Sciences and the Library Division

Faculty in the Social and Behavioral Sciences seek to cultivate in students a broad perspective on human behavior, our cultural heritage and our relationships with others, our social institutions and the environment. Twelve subject areas are included: Anthropology; Justice Studies; Economics; Early Childhood Education and Care; Education; Geography; Human Services; Library and Information Technology; Political Science; Physical Education, Fitness, and Sport Studies; Psychology; and Sociology. In addition to imparting knowledge of academic disciplines, the faculty challenges the learner to critically examine values, ideologies, social structures, political arrangements and accepted assumptions. Degrees and certificates are offered in the disciplines of Anthropology, Justice Studies, Early Childhood Education and Care, Education, Geography, Human Services, Library and Information Technology, Physical Education and Sociology. For more information, call (630) 942-2010 or visit cod.edu/sbsl (<https://cod.edu/sbsl/>).

Information Literacy Instruction Program

The mission of the Library's Information Literacy Instruction program is to teach students to be effective users and producers of ideas and information. The program provides students with varied opportunities for acquiring the needed knowledge and skills to become information literate. The program is administered through class sessions with library faculty, free workshops and the Library's Research 101 online tutorial at codlrc.org/research101 (<https://codlrc.org/research101/>).

Science, Technology, Engineering and Mathematics (STEM) Division

The STEM curriculum educates students in science, technology, engineering and mathematics. Study in the STEM disciplines includes exposure to theoretical concepts as well as problem-solving applications.

Science

The sciences include biological sciences (Anatomy/Physiology, Biology, Botany, Microbiology and Zoology), Chemistry, Earth Sciences and Physics. Biological sciences examine components of the living world and their interaction with the physical world. Chemistry explores the composition, structures and properties of substances and the changes they undergo. Earth Sciences include geology, meteorology, astronomy and water science. Physics studies the conceptual laws of motion, properties of states and matter, energy and forces.

Technology

The technological programs in the STEM division include Computer and Internetworking Technologies, Computer Information Systems,

Electronics Technology and Electro-Mechanical Technology. Technology programs include certificates and Associate in Applied Science degrees that prepare students with job market skills as well as the academic base to pursue baccalaureate education.

Engineering

Engineering combines the principles of science and mathematics with the principles of problem solving to provide advances in technology. College of DuPage offers an Associate in Engineering Science degree.

Math

Mathematics provides the tools and skills to understand quantitative relationships found in business, technology and the physical, biological and social sciences. Courses range from foundational mathematics through linear algebra and differential equations.

ACADEMIC POLICIES AND PROCEDURES

Earning College Credit Credits Defined

College of DuPage uses the semester system for awarding college credit. The academic year is divided into two semesters of approximately 16 weeks each and a summer term. The number of semester hours of credit granted for each course varies. The "Course Descriptions" section of this Catalog lists the value of each course in credit hours. A student must be enrolled in a minimum of 12 credit hours in fall and spring and a minimum of 6 hours in summer to be considered a full-time student. Half-time status is 6 to 11 semester credits during fall and spring semesters. In addition to standard semesters, the College also offers some sessions that vary in length from the standard term and may affect determination of status.

Class Standing

A student who has earned fewer than 30 semester credits is considered a freshman. A student with 30 or more hours has sophomore standing.

Semester Grades, Types of Grades and Grade Points

Final course grades may be accessed online at myaccess.cod.edu (<https://myaccess.cod.edu>).

The following abbreviations appear on student grade records (transcripts):

Abbreviation	Definition
A	High degree of excellence in achievement
B	Better than average achievement
C	Average/acceptable achievement
D	Minimum standard of achievement
F	Failure to complete minimum requirements
S	Satisfactory
I	Incomplete
W	Withdrawal
X	Audit

The following grade point values are assigned to letter grades:

Grade	Value
A	4 for each semester hour of credit
B	3 for each semester hour of credit
C	2 for each semester hour of credit
D	1 for each semester hour of credit
F	0 for each semester hour of credit

Grades of "S," "I," "R," "W," "N," and "X" and grades for courses numbered below 1000 are not included in the official grade point average (GPA), but will be shown on a student's transcript.

Satisfactory/Fail (S/F) Grade Option

Certain classes offer only Satisfactory/Fail grades. In most other classes, the student and the instructor may choose to use the Satisfactory/Fail grade option. The instructor retains the prerogative to determine whether the Satisfactory/Fail option is applicable to the course and to define what

grade must be earned to receive a satisfactory grade. The student must actively pursue and complete all of the requirements of the course to request a Satisfactory/Fail grade.

A student who would like to take a class Satisfactory/ Fail must obtain approval from the instructor. If granted, a signed contract with the instructor confirming the use of the Satisfactory/Fail grading option must be received by Student Registration Services no later than the course withdrawal deadline. Once the Satisfactory/Fail option has been finalized, the grading option may not be changed.

The satisfactory or "S" grade will not be computed in the student's GPA, but the fail or "F" grade will be computed. Credits earned in the Communication, Physical/Life Sciences, Mathematics, Humanities/Fine Arts and Social and Behavioral Sciences categories may NOT be graded with a Satisfactory/ Fail grade if the student is seeking any degree other than the Associate in General Studies degree or the Associate in Applied Science degree. Only 12 credit hours of "S" credit may apply toward any degree from College of DuPage.

Grade of Incomplete

The instructor of record may assign an incomplete or "I" grade when a student who has completed a substantial portion of a class with a passing grade is unable to complete the course within the prescribed time due to documented unforeseen circumstances. When an instructor agrees to issue an incomplete grade, an Incomplete Contract must be completed and submitted to the Office of Student Records.

Unfinished coursework must be completed within the time limits prescribed by the instructor, but may not exceed twelve (12) months from the end of the term in which the "I" grade was assigned. The student is responsible for contacting the instructor of record or, when the instructor of record is no longer employed at the College, the appropriate Dean regarding course completion. If the "I" has not been changed by the instructor of record within the twelve (12) month period, the "I" will automatically change to an "F" grade. During the time the "I" is on the student's record, it will not be calculated into the cumulative grade point average.

Credit by Demonstrated Competence

The College of DuPage Credit by Demonstrated Competence program offers students the opportunity to demonstrate their learning achievements outside the traditional college classroom and earn college credit for competencies equivalent to existing college courses. Students may complete 42 of the 60 semester credits needed toward an associate degree through this approach. Credit can be earned by Credit by Proficiency or Articulated Credit.

Credit Earned by Proficiency

This method offers an opportunity to gain college credit for knowledge that students have acquired in an occupational or educational environment outside of college or through other experiences that are related to specific College of DuPage courses. Through this process, students who can demonstrate that they have mastered the body of knowledge normally needed to complete a COD course can gain college credit without taking the course. Proficiency credit can be earned through the following methods:

Credit by Proficiency through Established Examinations

Several established exams developed by COD Faculty or national exams are available on a walk-in basis. Credit by national examination offers a student an opportunity to demonstrate knowledge in a particular subject

area by submitting scores from the nationally recognized Advanced Placement Program (AP) or the College-Level Examination Program (CLEP).

Advanced Placement Program

The Advanced Placement Program (AP) is a program of college courses offered in high school in cooperation with the College Board of Princeton, NJ. College of DuPage accepts credit for course areas in which a student has completed an Advanced Placement Program course examination with an acceptable score. The amount of credit accepted for each Advanced Placement Program course examination is determined according to its College of DuPage equivalent course.

College-Level Examination Program

College of DuPage is a national test center for the College-Level Examination Program (CLEP) which is sponsored by the Educational Testing Service and provides college-level, content-specific tests given to determine competency. All CLEP tests are computer-based. CLEP exams are given by appointment and the fee for each CLEP Examination is determined by the College Board. Registration materials, fee information and a list of CLEP exams accepted at COD are available from the Testing Center office, (630) 942-2401.

Credit by Proficiency through an Instructor

If an established exam does not exist, contact the appropriate Division office for permission to gain credit through proficiency. Procedures for earning credit are available from the Testing Center office.

Credit through Articulation

College of DuPage has entered into articulation agreements with some district high schools for classes that are equivalent to college classes. The agreements stipulate that when agreed-upon conditions are met, a student may apply for and receive credit at College of DuPage for these high school classes. The purpose of this cooperative effort is to eliminate needless duplication of content, save the student time and money, and to provide better continuity between high school and college curricula.

To obtain articulated credit, a student will follow application procedures included on the Application for Articulated Credit form available in the Office of Student Records. Application for the credit must be filed within two years of high school graduation. The student is responsible for an official transcript to be sent to the College of DuPage Office of Student Records directly from the high school.

Grade Review and Appeal Procedure (Board Policy 20-165)

College of DuPage recognizes that the responsibility for grading rests solely with faculty. This grade review procedure is available for a student to review a final course grade alleged to be arbitrary and capricious. Before requesting a formal review, a student is urged to make every effort to resolve the grievance informally with the instructor who issued the final grade. The student may terminate the formal procedure at any point, but when the procedure reaches full closure, the student must abide by the final disposition of the appeal and will be precluded from seeking review of the matter under any other college procedure. The Grade Review Procedure is fully outlined in Administrative Procedure 20-165.

A student may initiate a formal grade review if it is felt an arbitrary or capricious grade has been given, which means:

1. The assignment of a course grade to a student on some basis other than performance in the course; or

2. The assignment of a course grade to a student by resorting to unreasonable standards different from those which were applied to other students in the class; or
3. The assignment of a course grade by a substantial, unreasonable and unannounced departure from the instructor's previously articulated standards. Factual and computational errors are included in this definition.

Step 1. Student Consultation with Instructor and/or Associate Dean/Supervisor

1. The student contacts the instructor to discuss the grade and to work toward a mutual understanding of the basis and procedure used to determine the final grade. This request must be initiated by the student within forty-five (45) calendar days of the last day of the academic term for which the grade was assigned. If the instructor is not available, the student must register the request for the review with the instructor's associate dean/ supervisor.
2. If the problem is not resolved between the student and the instructor at Step 1, Step 2 must be initiated by the student within ten (10) days following the meeting with the instructor or associate dean/ supervisor.

Step 2. Calling of Grade Review Committee

1. A student requests that the associate dean/supervisor initiate a formal grade review by the Division's standing Grade Review Committee. Each Division will determine its unit process for establishing its committee, but all committees will consist of three voting faculty members from within the Division and will exclude the instructor who issued the grade under review.
2. The student receives a Grade Review Form from the associate dean/supervisor and completes it in writing.
3. The student submits the completed Grade Review Form to the associate dean/supervisor within ten (10) days of receiving the form.
4. The associate dean/supervisor sends the instructor a copy of the student's completed Grade Review Form within five (5) days, to be returned with a written response from the instructor within ten (10) days after receiving the form from the associate dean/supervisor.
5. The associate dean/supervisor will call the Grade Review Committee and the committee will meet within ten (10) days of receipt of the completed Grade Review Form from the instructor to determine whether to dismiss or hear the case.
6. The Grade Review Committee will dismiss the appeal if:
 - a. The student has submitted the same, or substantially the same, complaint to any other formal grievance procedure; or
 - b. The allegations, even if true, would not constitute arbitrary and capricious grading; or
 - c. The appeal was not timely; or
 - d. The student has not conferred with the instructor or with the instructor's associate dean/supervisor in accordance with Step 1 of these procedural steps.
7. If the request for review is not dismissed, Step 3 follows.

Step 3. Actions of the Grade Review Committee

1. The Grade Review Committee will submit a copy of the student's written statement to the instructor with a request for a written reply within ten (10) working days if this step has not been taken prior to the convening of the committee. (See Step 2, d. above.) If it then appears that the dispute may be resolved without recourse to the procedures specified in Step 3: b., which follows, the committee

will attempt to arrange a mutually agreeable solution between the student and instructor.

2. If a mutually agreeable solution is not achieved, the Grade Review Committee will proceed to hold an informal, non-adversarial, fact-finding meeting concerning the allegations. Both the student and the instructor will be entitled to be present throughout this meeting and to present any relevant evidence. Neither the student nor the instructor will be accompanied by an advocate or representative. This meeting will not be recorded by any parties and will not be open to the public.
3. The Grade Review Committee will deliberate privately at the close of the fact-finding meeting. If a majority of the committee members finds the allegation supported by any clear and convincing evidence, the committee members will take any action which they feel would bring about substantial justice and includes, but is not limited to:
 - a. Directing the instructor to re-evaluate the student's work.
 - b. Directing the instructor to administer a new final or paper in the course.
 - c. Directing the cancellation of the student's registration in the course.
 - d. Directing the award of a grade of "satisfactory" in the course, except that such a remedy should be used only if no other reasonable alternative is available.
4. The Grade Review Committee is not authorized to award a letter grade or to reprimand or otherwise take disciplinary action against the instructor. The decision of the committee will be final and will be promptly reported in writing to the parties. The associate dean/supervisor will be responsible for implementing the decision of the Grade Review Committee.

Course Withdrawals and Specialized Registration

Withdrawal from a Class

The final day for a student to withdraw from any course will be equal to 75 percent of the time for the respective academic session. The student's class schedule shows 100 percent and 50 percent withdrawal deadlines specific to the student's class. Students will receive a grade of "W" for withdrawals made after the 100 and 50 percent refund periods.

Administrative Withdrawal

Students not actively attending classes or engaged in online course activities may be withdrawn from the class by the instructor. In certain cases, the Dean of Enrollment may also grant an administrative withdrawal.

Repeating a Course

A student may repeat any course taken at College of DuPage. Repeated courses are indicated with an "R" following the assigned grade on the student's official transcript, which indicates that the course was repeated and the student received the same or a higher grade. The cumulative grade point average (GPA) no longer reflects the original grade received as of the term it was retaken. Repeated courses will be granted credit only once except as noted in the Course Descriptions section of the Catalog.

Auditing a Course

To audit a class, the student must first register and then request a permit from the instructor to change to an audit; if approved by the instructor, the audit cannot be revoked. Students may not request permission to

audit a class after midterm. The audit grade of "X" is recorded on the student's permanent academic record (transcript). No credit is earned, or will be applied to a degree or certificate, and the audit grade does not affect the student's grade point average (GPA).

Standards of Academic Progress

Good Standing

Students are considered to be in good academic standing with a cumulative GPA of 2.00.

Academic Warning

Students are placed on Academic Warning when less than 12 attempted College of DuPage credit hours are earned and the cumulative grade point average is below 2.00/4.00 scale. Academic warning does not restrict registration but students are encouraged to discuss their lack of satisfactory progress with a counselor.

Academic Probation I

Students are placed on Probation I when 12 or more College of DuPage credit hours are attempted and earned less than a 2.00/4.00 cumulative and semester grade point average. Students must meet with a counselor to review their academic progress prior to enrollment for the next semester. Students are restricted from registration until they comply with this requirement. A registration restriction will remain on the student's record until the cumulative grade point average reaches 2.00 or higher. Students will be restored to good standing once their cumulative grade point average is 2.00 or higher.

Academic Probation II

Students are placed on Probation II after serving one semester on Probation I with a cumulative and semester grade point average less than 2.00/4.00. Students must meet with a counselor to review their academic progress prior to enrollment for the next semester. Students are restricted from registration until they comply with this requirement. A registration restriction will remain on the student's record until the cumulative grade point average reaches 2.00 or higher. Students will be restored to good standing once their cumulative grade point average is 2.00 or higher.

Academic Suspension I

Students are placed on Suspension I after serving one semester on Probation II with a cumulative and semester grade point average less than 2.00/4.00. When final grades are posted after the Probation II semester, a student will be withdrawn from current semester courses and issued a refund. The Suspension I status will be in effect for one fall or spring semester following Probation II. A registration restriction will remain on the student's record until the cumulative grade point average reaches 2.00 or higher. Students will be restored to good standing once their cumulative grade point average is 2.00 or higher.

Academic Suspension II

Students are placed on Suspension II after serving one semester on Suspension I with a cumulative and semester grade point average less than 2.00/4.00. When final grades are posted after the Suspension I semester, a student will be withdrawn from current semester courses and issued a refund. The Suspension II status will be in effect for 12 consecutive months. A registration restriction will remain on the student's record until the cumulative grade point average reaches 2.00 or higher. Students will be restored to good standing once their cumulative grade point average is 2.00 or higher.

Academic Reinstatement

Students will be considered for Academic Reinstatement following their Suspension I and/or II status. Reinstatement is not guaranteed once a student is suspended. Once reinstated, the student will need to work with a counselor to create a success plan, course selection will be restricted and no future registration can occur without counselor approval. In the semesters following academic reinstatement, if the semester grade point average is 2.00 or below, a student will be placed on continued suspension status until the cumulative grade point average meets the minimum of 2.00. If the semester GPA is below 2.00 and the cumulative GPA is below 2.00, the student again will be suspended. Academic warning, probation and suspension notations are recorded on the student's academic record, but not printed on the official transcript.

Excessive Withdrawal Policy

Students with a recurring, overall pattern of withdrawal from College of DuPage courses will be periodically notified of the effect that withdrawal grades can have on progress toward degree/certificate completion and financial aid eligibility. Students failing to make satisfactory academic progress may lose their financial aid funding. Students are encouraged to meet with a counselor or advisor to discuss effective strategies for course selection and completion.

Appeals for Academic Reinstatement

Appeals relating to the Standards of Academic Progress policy should be made to the Dean of Students.

Academic Forgiveness Policy

If you meet the following criteria, the failing grade(s) will remain on your transcript but will be removed from your GPA calculation. There will be a notation on your official transcript indicating that you have been granted forgiveness for the failed course(s).

Forgiveness Criteria

- Only F grades will be considered
- A period of at least 36 months of non-enrollment has elapsed since the end of the last term of grades to be forgiven (excluding non-credit classes).
- Upon return, a minimum of 12 consecutive semester hours with no grades of 'D', 'F', 'S', 'I', or 'X' and no more than two 'W' grades must be earned at College of DuPage before forgiveness will be considered. In addition, a student must earn the same number of credit hours with a grade of 'C' or better equal to the number of credit hours of 'F' grades to be forgiven.
- A maximum of 25 quarter hours or 18 semester hours of 1000-level courses and above will be forgiven.
- Forgiveness will be granted one time only for each student.

Procedure for Forgiveness

1. When the eligibility requirements have been fulfilled and forgiveness granted, the student's cumulative grade point average will be recalculated with the "F" grades removed from the calculation. However, the "F" grades will remain on the student's official transcript with a notation indicating that the student has been granted forgiveness.
2. Financial aid eligibility is determined by the Standards of Progress policy for financial aid recipients. If a student is granted academic forgiveness, eligibility for financial aid is not guaranteed.

Academic Records

Degree Audit

A computerized degree audit reports a student's progress toward the completion of the degree or certificate offered at College of DuPage. The audit lists the categories completed and in-progress, the requirements not met, and courses from which the student may select to complete their degree or certificate.

If a student is working toward a degree or certificate, or is planning to transfer to another college or university, the student may check his/her progress by running a Degree Audit online at myaccess.cod.edu (<http://myaccess.cod.edu>). A student may run an audit of any degree or certificate.

An Illinois Articulation Initiative (IAI) audit reports by category all courses a student has completed that fulfills the General Education Core curriculum. The audit also lists all other COD courses from which a student may select to complete the IAI General Education Core curriculum. The Illinois Articulation Initiative (IAI) is designed to facilitate the transfer of students from one Illinois institution to another.

Official Transcripts

A student may order a copy of their official College of DuPage transcript online through the student portal at inside.cod.edu, through their student account at myaccess.cod.edu or on the main website at www.cod.edu (<https://www.cod.edu>). See the College website for details on other options for ordering an official transcript, <https://www.cod.edu/records/order-transcripts.html>.

Transfer Credit Evaluation

Students intending to earn a degree or certificate at College of DuPage, and expecting to apply credit earned elsewhere, must contact institutions previously attended requesting an official transcript to be sent directly to the Office of Student Records. Credits earned at other regionally accredited colleges/universities are eligible for transfer to College of DuPage. Transcripts are evaluated in the order in which they are received and are completed in about three weeks.

Recognition of Academic Achievement

Academic Honors

Each semester College of DuPage recognizes students whose grades reflect outstanding achievement. All students who are currently in good academic standing, enrolled in at least six (6) credit hours of 1000-level or above courses, do not have a current incomplete "I" grade, and whose semester grade point average is 3.50 to 4.00 inclusive, will be awarded Academic Honors. This designation becomes part of the student's permanent academic record and is printed on the student's official transcript.

Graduation Requirements

The official determination of a student's status relative to graduation is made through the Office of Student Records. Students should submit an Application for Degree or Certificate no sooner than one semester before expected completion.

Students should run their Degree Audit online to review their progress. When the Degree Audit indicates the program status of "Pending Anticipated Complete," it is time to apply for graduation. Student Success Counselors or Program Advisors, while not graduation evaluators, are knowledgeable about graduation requirements and can assist students

with understanding these requirements, interpreting the Degree Audit, and planning so that all requirements are met.

Graduation Honors

Graduation honors are indicated on the diploma. Beginning with the fall 2014 semester, graduation honors are also indicated on the official transcript. They are designated as follows in three categories: Highest Honors is awarded to students earning a minimum of 40 credits at College of DuPage and a cumulative College of DuPage grade point average of 4.00. High Honors is awarded to students with a cumulative College of DuPage grade point average of 3.60 to 4.00. Honors is awarded to students with a cumulative College of DuPage grade point average of 3.20 to 3.59. Graduation honors are determined from the cumulative grade point average in the semester in which the student completes degree requirements. Students must take at least eight (8) semester hours of credit for letter grades (excluding "S") to be eligible for honors recognition at graduation.

Honor Societies

College of DuPage has many honor societies for qualified students to join. For a full listing of honor societies as well as event and membership information, visit cod.presence.io/organizations (<https://cod.presence.io/organizations/>). Select "Honor Societies" from the Categories menu.

STUDENT SERVICES AND GENERAL STUDENT INFORMATION

Student Services

College of DuPage provides many services to assist students in making appropriate academic and career plans, addressing other issues and enriching their College of DuPage experience through co-curricular activities. College of DuPage wants every student to achieve success in his/her own college endeavors and to have the opportunity to grow both in and out of the classroom.

Counseling, Advising and Transfer Services

Counseling, Advising and Transfer Services at College of DuPage provides services to help students develop their educational plans, and with career and personal counseling. Services include assistance with course selection, information on College of DuPage's career and transfer programs, and access to current and online resources. Student Success Counselors also provide counseling designed to meet the needs of students in academic difficulty. Mental Health Counselors are available to assist with non-academic concerns, personal development and special situations that may interfere with the student's educational and personal goals. Services are available to all full- and part-time students enrolled at all locations of College of DuPage, as well as those students taking courses online. Students are encouraged to see a Student Success Counselor or Program Advisor each semester to update their educational plans, check for changes in the College of DuPage curricula and verify transfer information.

Students may schedule an appointment through the Counseling and Advising Center by calling (630) 942-2259 or email at counseling@cod.edu.

Services are also provided at College of DuPage centers within District 502. It is recommended that students call in advance to schedule appointments at our main campus and center locations.

Center for Access and Accommodations

College of DuPage is committed to the equitable access of educational opportunities for individuals with disabilities, in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, as amended. The Center for Access and Accommodations processes disability-related requests for services and coordinates accommodations for eligible students with disabilities. Requesting accommodations is completely voluntary and must be initiated by the student (with or without the help of an advocate or support person). Students should contact the Center for Access and Accommodations with any questions they have about accessibility or accommodations. Students who are requesting academic accommodations must self-identify and provide documentation of a disability diagnosis to the Center for Access and Accommodations prior to the start of term. Students who register with Access and Accommodations after the start of term may experience a delay in services. Students should visit cod.edu/access and click on "Complete form to request accommodations" to start the process.

Veterans Services

Veterans Services is a resource center for transitional, educational and financial information. Through a variety of resources and services,

center staff provides processing of military and veteran educational benefits; guidance with scholarships and loans; orientation; as well as referrals for specialized veterans counseling. The local chapter of the Student Veterans America is also sponsored by this office and meets regularly in the Veterans Lounge. The Veterans Services office provides community connections and promotes awareness through presentations and participation in ongoing events. The office assists students with:

- Processing Department of Veterans Affairs, Department of Defense and Illinois Student Assistance Commission programs designed for veterans, military personnel and dependents.
- Applying for and participating in the Army or Air Force Reserve Officers' Training Corps.
- Staying connected to other veterans and their families through outings, social events and celebrations.

International Student Services

The International Student Services office serves prospective international students interested in applying for an F-1 or M-1 student visa or transferring from another college or university as well as serving currently enrolled international students with comprehensive immigration advising for maintenance of the F-1 or M-1 visa.

The International Admissions Representative is available for assistance with the international application process by calling (630) 942-2979. The International Advisor is available for assistance with immigration advising, USCIS applications and notifications, basic academic and personal advising as well as employment workshops by calling (630) 942-3328.

The Community College Initiative Program (CCIP) is a U.S. Department of State grant that supports students for one academic year in the United States. Students from Colombia, Dominican Republic, Ghana, India, Indonesia, South Africa, Brazil, Egypt, Ivory Coast, Kenya, Bangladesh and Turkey enroll in academic courses, participate in professional development and engage in community service while they gain perspective on American society, culture and institutions. The program coordinator can be reached at (630) 942-2564.

All services can also be obtained by visiting the International Student Services office in the Student Services Center (SSC), Room 2225

Career Services Center

The Career Services Center provides job and career-related support and guidance. Through a variety of resources and services, this center provides students, alumni and community residents with a connection to area employers and opportunities for paid and non-paid work experiences such as, internships, full- and part-time employment and service-learning opportunities.

The Career Services Center is located in the Student Services Center (SSC), Room 3258. Career Services helps students to be career and workforce ready through a variety of resources, including:

- Electronic tools to support career preparation
- Employer resource information
- On-campus interviewing with employers and recruiters
- Career specialists and workshops to assist students in their job search, professional brand and more!

- Web-based job board which posts full- and part-time employment opportunities and internships
- Annual Career and Internship Fair with more than 70 employers

For more information about Career Services, call (630) 942-2230 or email csc@cod.edu.

Math Assistance Area

The Math Assistance Area (MAA) offers help to students enrolled in COD mathematics courses, in physics and in most chemistry classes. Help is available to COD students taking their class at any COD location, in any modality. Most students are served on an on-demand basis, with no appointment needed, in both face-to-face and online formats when the campus is open. The MAA is staffed by COD full-time mathematics faculty and non-classroom adjunct faculty who are available to answer questions about homework assignments or to clarify concepts. The faculty can also provide mathematics advising, information about math placement test preparation, and course recommendations. On campus, the MAA houses print material for COD math, physics and chemistry courses, including current textbooks, for student use in the MAA. For more information, call (630) 942-3339 or email us at mathassistancearea@cod.edu.

Tutoring Services

Tutoring Services provides assistance for COD courses across the curriculum. Students must be enrolled in the courses for which they are requesting services. Tutoring is available at the Glen Ellyn campus with select services offered at COD centers when sites are open. Many services are available online without an appointment through the "Student Support" tab on the College's Blackboard site (<https://catalog.cod.edu/student-services-general-student-information/www.bb.cod.edu>). Trained peer and professional tutors hold demonstrated master proficiency in the subjects they tutor. To request tutoring or obtain more information, call (630) 942-3686 or email tutoring@cod.edu.

Writing, Reading, Speech Assistance

Writing, Reading, Speech Assistance (WRSA) supports all currently enrolled COD students. This one-on-one assistance is available for all types of assignments in every academic discipline. Coaches/consultants work with students to develop strategies for improving their communications skills.

Writing coaches assist students in narrowing a topic, focusing on a thesis, utilizing clear writing strategies and making revisions.

Reading coaches review strategies for understanding textbooks and study skills.

Speech consultants provide help with topic selection, research, outlining and presentation delivery. The speech studio provides a supportive environment to practice public speaking skills.

Forty-five minute sessions are available on a walk-in basis or can be scheduled in advance online at <https://cod.mywconline.com> or by calling (630) 942-3355.

WRSA also offers info sessions for the college placement tests at main campus and the COD centers. Additional workshops are presented at the main campus on various reading, writing, speech and study skills topics throughout the term. A list of current workshops is available at www.cod.edu/learningcommons.

Library

The Library offers its collections and services to students, faculty, staff and District 502 residents. The Library's website, library.cod.edu, provides access to the Library's catalog as well as detailed information about Library services and links to resources for research.

The Library provides teaching and learning materials to support and enrich students' educational experiences. It offers an impressive array of print, audiovisual and electronic resources and provides assistance in how to locate information and use Library resources. The Library has public computers, a digital media lab, student study rooms, and ample study space. Its many special services and collections include I-Share, classes and workshops, and the Career and College Information Collection.

Student Rights and Responsibilities

Code of Student Conduct (Board Policy 20-35)

The College will maintain a Code of Student Conduct to provide fair and reasonable rules and procedures to promote personal development and to ensure that students do not engage in conduct that interferes with the operations of the College. Students are responsible for their own conduct in complying with existing College policies regarding student behavior. The College will maintain disciplinary procedures to address violations of the Code of Student Conduct.

Code of Student Conduct Procedures

Conduct which interferes with College purposes is not acceptable, yet a member of the College community can rightfully expect that the College will exercise with restraint its power to regulate student behavior and that rules and regulations will be adopted only when the educational process clearly and directly requires such action. Students are accountable for their own conduct. Sanctions for violations of College rules and regulations for conduct which interferes with college affairs will be addressed by the College. Student conduct which involves an alleged violation of criminal law, will be referred to appropriate civil authorities.

Students at College of DuPage are expected to demonstrate qualities of morality, integrity, honesty, civility, honor and respect. Behavior which violates these standards for which discipline may be imposed includes, but is not limited to, the following:

1. Cheating, plagiarism, forgery, misrepresentation and all forms of academic dishonesty.
2. Purposely furnishing false information to any College official, faculty member or office.
3. Forgery, alteration or misuse of any College document, record, form or instrument of identification.
4. Failure to meet College financial obligations.
5. Verbal abuse, physical abuse, assault, threats, intimidation, harassment, sexual harassment, coercion or other conduct which threatens or endangers the health and safety of any person on College premises.
6. Intentional damage, destruction, attempt to damage or destroy, theft or attempted theft of College property or the property of College personnel, other students or any other person or the property of independent contractors maintained or stored on College premises.
7. Theft, attempted theft or mutilation of Library materials.
8. Disruption or obstruction of any operation of the College, including, but not limited to, teaching, learning, disciplinary proceedings, college activities, public service functions on or off-campus or other

authorized non-college activities when the act occurs on College premises.

9. Illegal or unauthorized use of computing resources as defined in the Information Technology "Electronic Communications Guidelines" located in the Office of the Director of Information Technology and on the Information Technology website at www.cod.edu/it including, but not limited to:

- Unauthorized entry into a file to use, read or change the contents or for any other purpose.
- Unauthorized transfer of a file.
- Unauthorized use of a computer account, identification number or password.
- Use of computing facilities to interfere with any other person's work.
- Use of computing facilities to interfere with the operation of the College computing system or any other computing system.
- Unauthorized use or copying of copyrighted software.
- Use of computing facilities to send obscene or abusive messages or images.
- The installation or use of a program whose effect is to damage computer systems, media or files.
- Unauthorized use of computer time for personal or business purposes. Unauthorized use of College telephones, facsimile (fax) machines or other College equipment.
- Unauthorized possession, duplication or use of keys to any College premises, unauthorized entry or attempted unauthorized entry to College premises, unauthorized occupancy or use of College premises.
- Conduct, behavior or involvement in an activity which causes or may reasonably lead College authorities to anticipate substantial injury or disruption or material interference with College activities or the rights of others.
- Possession, use, distribution or attempt to use or distribute an illegal or controlled substance or look-alike. Refer to Board Policy 25-5, Drug Free School.
- Possession, use, distribution or attempt to use or distribute alcoholic beverages. Refer to Board Policy 25-5, Drug-Free Schools.
- Use of tobacco products is prohibited in all indoor College facilities, owned or leased, and in all college-owned vehicles. Refer to Board Policy 10-160, Smoke-Free Campus.
- Use or possession of a firearm, weapon or explosive, including, but not limited to, a pistol, revolver, switchblade knife, bomb or any object containing noxious or dangerous chemicals, unless such use or possession is authorized by the College of DuPage Police Department.
- Gambling of any kind.
- Violation of published College Board Policies as stated in the College of DuPage Board Policy Manual, College of DuPage Administrative Procedures, departmental policies and procedures and College of DuPage Police Department procedures.
- Violation of federal, state or local law on College premises or at College-sponsored or supervised activities.

Abuse of the judicial system, including, but not limited to:

1. Failure to obey the summons of a judicial body or College official.
2. Falsification, distortion or misrepresentation of information before a judicial body.

3. Disruption or interference with the orderly conduct of a judicial proceeding.
4. Initiation of a judicial proceeding knowingly without cause.
5. Attempting to discourage an individual's proper participation in, or use of, the judicial system.
6. Attempting to influence the impartiality of a member of a judicial body prior to, and/or during the course of the judicial proceeding.
7. Or attempting to influence another person to commit an abuse of the judicial system.

Violation of Federal, State or Local Laws (Board Policy 20-40)

1. College disciplinary proceedings may be initiated against a student charged with a violation of a federal, state or local law which is also a violation of the Student Code of Conduct; that is, if both violations result from the same factual situation, without regard to pending civil litigation in court or criminal arrest and prosecution. Proceedings under this code may be carried out prior to, simultaneously with or following civil or criminal proceedings off-campus.
2. When a student is charged by federal, state or local authorities with a violation of law, the College will not request or agree to special consideration for that individual because of the individual's status as a student. If the alleged offense is also the subject of a proceeding before a judicial body under the Student Code of Conduct (Refer to the College Catalog), however, the College may advise off-campus authorities of the existence of the Student Code of Conduct and how such matters will be handled internally within the college community. The College will cooperate fully with law enforcement and other agencies in the enforcement of criminal law, on College of DuPage premises. Individual students and college employees, acting in their personal capacities, remain free to interact with governmental representatives as they consider appropriate.

For more information, contact the Dean of Students, (630) 942-2485.

Code of Academic Conduct (Board Policy 20-41)

College of DuPage is committed to the promotion of absolute integrity and high ethical standards of individual honesty in academic work. As members of the College community, students are expected to refrain from academic dishonesty in all forms, including but not limited to: cheating, plagiarism, furnishing false information, abuse of academic materials, misconduct during a testing situation, facilitating academic dishonesty, and misuse of identification with intent to defraud or deceive.

All work submitted by students is expected to be the result of the student's individual thoughts, research and self-expression. When students use ideas, wording, or organization from another source, the source shall be acknowledged appropriately.

The College will maintain disciplinary procedures to address violations of the Code of Academic Conduct.

Code of Academic Conduct Procedures

As members of the College of DuPage community, we have expectations of both faculty and students. Thus, there must be a shared commitment to the highest standards of learning.

Faculty and students have mutual responsibility for establishing a clear understanding of the importance of honest academic behavior and for practicing the College of DuPage values of Integrity, Honesty, Respect and Responsibility.

Together we envision a positive learning environment that promotes the open exchange of ideas by practicing civility as defined in the Code of Student Conduct and ethical learning behaviors as defined in the Code of Academic Conduct.

Violations and Sanctions

Violations of the Code of Academic Conduct are activities (observed or reported) or materials that are deceitful and dishonest. Violations of the Code will be reported and determined in accordance with the processes described in the procedures relating to academic integrity. Sanctions for violations of the Code will be based upon the nature of the violation and may include any of the sanctions in the procedures relating to academic integrity.

Responsibilities of Students and Faculty

The objective of the Code of Academic Conduct is to sustain an environment in which students recognize and demonstrate the importance of being accountable for their academic behavior.

Students have the responsibility to:

- Become fully knowledgeable of the Code of Academic Conduct;
- Produce their own work;
- Encourage honesty and integrity among their fellow students.

Faculty members have the responsibility to:

- Review classroom expectations with respect to all aspects of academic honesty;
- Describe those expectations clearly in the class syllabus;
- Inform the student directly of any charges of academic dishonesty;
- Refer students to the Dean of Students in a consistently applied manner.

Definitions—Behaviors Covered by the Code of Academic Conduct

As members of the College community, students are expected to refrain from academic dishonesty in all forms, including, but not limited to:

Cheating—Copying or attempting to copy from another student in any work submitted for evaluation, whether tests or assignments; intentionally using or attempting to use unauthorized materials, information, or study aids; use of any unauthorized assistance, resources, materials or electronic/ cellular devices with or without photographic capability in taking quizzes, tests or examinations; altering graded work after it has been returned, then submitting the work to be re-graded.

Plagiarism—The reproduction of ideas, words or statements of another person as one's own without acknowledgement, or use of an agency engaged in the selling of term papers or other academic materials.

Unauthorized Collaboration—Intentionally sharing or working together on an academic exercise when such actions are not approved by the course instructor.

Furnishing False Information—Intentional and unauthorized falsification or invention of any information or citation furnished to any College official, faculty member or office; misuse of identification with intent to defraud or deceive.

Facilitation of Academic Dishonesty—Permitting or attempting to help another violate the Code of Academic Conduct; alteration or sabotage of another student's work, such as tampering with laboratory experiments.

Abuse of Academic Materials—Destroying, stealing, or making inaccessible library, laboratory or other academic resource material, or attempting to do so; stealing or otherwise obtaining advance copies of placement tests; the acquisition, without permission, of a test or other academic material belonging to College of DuPage, to any department, or to any staff member; duplicating copyrighted software without authorization or using such software on College computers; "hacking" on College computers or installing "virus" programs.

Bribes, Favors and Threats—Bribing or attempting to bribe, promising favors to, or making threats against, any person with the intention of affecting an evaluation of a student's academic performance; conspiring with another person who then performs one of these acts on one's behalf.

Complicity in Academic Dishonesty—Helping another commit an act of academic dishonesty, especially providing material or information to another person with knowledge that this will be used deceitfully in an academic evaluation activity; permitting one's own work to be submitted by another person as if it were that person's original work.

Falsification of Records and Official Documents—Altering transcripts, grade reports or other documents affecting academic records; forging a signature of authorization or falsifying information on any academic document, such as permission forms, petitions or other documents.

Personal Misrepresentation and Proxy—Taking another person's place in an exam, placement test or other academic activity, either before or after enrollment; having another person participate in an academic evaluation activity or evaluation in place of oneself.

Procedures for Violations of the Code of Academic Conduct

Discovery of Irregularity

As part of their responsibilities, faculty members must make judgments about the academic performance of their students, with due regard for established standards of scholarship. During this process, a faculty member may discover that a student's activity or the material a student has submitted contains irregularities that appear to be violations of the Code of Academic Conduct. (If no faculty is directly involved, such as in the Testing Center, the person who discovers the irregularity will notify their unit administrator, who will then be responsible for executing the Code of Academic Conduct duties normally assigned to the faculty member involved.)

Notification to Student of Discovery of Violation(s) of the Code of Academic Conduct

When an irregularity is discovered, the faculty member will notify the student as promptly as reasonably allows, either orally or electronically, and will by means of this notification provide the student with a timely opportunity to meet and discuss the irregularity.

Initial Meeting with Student

At this meeting, the faculty member will determine whether or not an irregularity actually occurred. If so, the faculty member will then determine whether the situation is appropriately resolved by further instruction, in which case it becomes a learning opportunity, or if the alleged violation requires further investigation and a possible sanction.

At the conclusion of the meeting, or as soon thereafter as reasonably possible, the faculty member will inform the student of his or her determination.

Learning Opportunity

A faculty member may determine a violation has occurred but is unintended, e.g., the result of the student's misunderstanding of the assignment or ignorance of research conventions. Rather than invoke the Code of Academic Conduct Violation procedure, the instructor may use the opportunity to advance the student's learning by requiring a corrected version of the work in question. In such a case, the instructor may grade only the final product and may not impose any sanction.

1. Learning Opportunities are to be settled between the faculty member and the student. No report to either the Division Dean or the Dean of Students is necessary.
2. If the student refuses the Learning Opportunity procedure, he/she must be informed that, in consequence, the instructor may choose to file a complaint alleging academic dishonesty with the Dean of Students.

Informal Faculty Resolution of the Complaint Instances

When a Code of Academic Conduct violation occurs which would result in a sanction no greater than failure of the assignment or test, and for which the student accepts responsibility, the faculty member and the student may resolve the complaint between them by:

1. Discussing the violation.
2. If the faculty member is confident that the student understands and acknowledges that he/she did something wrong and the student is willing to accept the sanction considered appropriate by the faculty member (failure on the assignment; failure on the test; completion of an alternative assignment; or failure for the course), the matter can be resolved between the faculty member and the student.
3. The faculty member then fills out the Academic Dishonesty form indicating the matter will be recorded in the Judicial Database, but no further action is required, which is then signed by both the faculty member and the student.
4. Copies of the form are kept by the faculty member, given to the student, the Division Dean, and the Dean of Students.
5. If the Dean of Students' office determines the student has been responsible for prior violations, the matter may be referred for a formal hearing.

Formal Resolution of the Complaint

In instances when the student denies complicity in an act of academic dishonesty or when prior methods to bring the issue to closure were not effective, a student must be afforded the due process of a Formal Judicial Hearing.

Determination of the Need for a Formal Judicial Hearing

If, after talking with the involved student, the faculty member determines the situation involved an apparent Code of Academic Conduct violation for which the student denies responsibility or for which a sanction greater than

4. or failure in the course may be warranted, the faculty member will confer with the Division Dean to determine if a Formal Judicial Hearing is appropriate.

If the need for a Formal Judicial Hearing is determined, the faculty member will complete the portion of the Academic Dishonesty Complaint form which requests a Formal Judicial Hearing by the Dean of Students or designee. The report will describe the violation and include all relevant backup material.

Notification to Student of a Formal Judicial Hearing

1. In preparation for the Formal Judicial Hearing, the Dean of Students will review the student's file to determine if this is a first offense.
2. The Dean will place the student's registration on temporary hold, so that the student can neither withdraw from the course in question nor register for future courses until the current matter is settled.
3. The Dean will notify the student in writing that the complaint has been filed (enclosing a copy of the Academic Dishonesty Complaint form completed by the instructor and the Code of Academic Conduct Policy and Procedure) and require the student to attend a Formal Judicial Hearing with the Dean or designee.
4. If the student fails to attend the Judicial Hearing or if the student does not respond to the Hearing notice, the student registration record will remain on hold until the matter has been formally resolved.
5. If the process cannot be completed before the end of the term, the instructor may be directed to assign the student an Incomplete (I) in place of a grade for the course, to be changed when the matter is resolved.

Formal Judicial Hearing

During the hearing, the Dean of Students or designee will review both the complaint and the Code of Academic Conduct procedures with the student to ensure the student understands them clearly and is aware of the possible consequences.

1. The student will have an opportunity to present evidence and/or make statements in his/her behalf.
2. At the conclusion of the hearing, if the student now agrees that he/she was involved in a violation of the Code of Academic Conduct, the Dean or designee will complete the Judicial Hearing Outcome Form, assigning the appropriate sanction(s), which may include completion of learning modules from the College of DuPage Library Workshops.
3. In the event the student has been found at fault in an earlier incident involving academic dishonesty, the Dean or designee will determine whether a greater degree of sanction is appropriate.
4. If the Dean or designee has determined that no academic dishonesty has taken place, no sanction will be assigned. The student will then have the option of completing the class; transferring to another section of the same class, if that is possible; or withdrawing from the class.
5. The hold will be removed from the student's record.
6. In cases where the student is required to complete a Library Workshop, the hold will be removed upon notification that has been completed.
7. The student should understand that a record of the judicial proceedings will be kept on file for a period of three years.
8. At this point, notice of academic dishonesty will not be recorded on the student's transcript. However, should the student require a transfer application to another institution or apply for an honor or award, which require disclosure of the student's academic honesty,

if it is within the three-year period, such academic dishonesty will be disclosed.

9. At the conclusion of the Formal Hearing, the student will be handed a Hearing Outcome Form which clearly states the sanction(s) imposed. The student will be required to sign and date the form. The original signed copy will be given to the student; the other copy will become part of the student's file. Outcome information on this form will be shared with the faculty member making the original complaint, the associate dean in that area, and be added to the Judicial Database.
10. A follow-up letter will be sent to the student reiterating the charge and the sanction(s).

Formal Hearing Outcome

At the conclusion of the Hearing, if the Dean or designee determines that a violation of the Code of Academic Conduct has occurred, one or more of the following sanctions will be administered, based upon the Dean's or designee's judgment concerning the nature of the violation.

Sanctions—Definitions

1. **Disciplinary Warning:** A notice in writing stating the student has violated the Code of Academic Conduct.
2. **Disciplinary Probation:** A reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is again found to be in violation of the Code of Academic Conduct during the probationary period.
3. **Disciplinary Loss of Privileges:** Denial of access to privileges commonly available to applicants, students and alumni of College of DuPage. These may include, but are not limited to access to particular student employee positions on campus,
4. access to the Library, access to computer facilities, access to career and placement services, access to scholarships, access to academic honors, participation in clubs, organizations, athletics or campus activities. This denial may stand alone, it may accompany suspension, and it normally accompanies extended suspension.
5. **Withdrawal from Class:** Administrative withdrawal from a class or classes in which a student is enrolled for the current and/or subsequent semester. Administrative withdrawals do not provide for the refund of tuition and fees.
6. **Limited Access:** Administrative restriction to selected areas/locations of College facilities.
7. **Disciplinary Suspension:** Denial of permission to register for academic work at College of DuPage for a designated period of time, usually not more than one year. Conditions for readmission will be specified by the Dean or designee.
8. **Extended Disciplinary Suspension:** Dismissal from College of DuPage for a designated period of up to five years: students under this sanction must petition the Dean of Students for readmission to College of DuPage.

Sanctions for Course Violations

In the case of a violation occurring in a College course, in most cases, a student will be placed on disciplinary warning or probation and may be assigned one or more of the following:

1. An "F" grade for the activity in which the violation occurred.
2. An "F" grade for the course in which the violation occurred and immediate dismissal from the course.

3. Placement on disciplinary suspension for at least one semester, either: a) the semester in which the violation occurred, or b) the semester following the violation.
4. Placement on extended disciplinary suspension from the College with a letter attached to the transcript indicating the student has been found to have violated the Code of Academic Conduct.
5. This letter will remain in the student's file for up to three years as determined by the Dean of Students or designee; the students must petition the Dean of Students to be re-admitted.
6. Disciplinary Loss of Privileges.
7. A project to help make reparation to the community and demonstrate that learning has occurred.

Sanctions for Assessment Test Violations

In the case of a violation occurring during an assessment test, in most cases, the student or student applicant will be placed on disciplinary probation, will be required to take all future assessment tests under supervision in the Testing Center, and may:

1. Be limited in registering for the next term to only the course(s) indicated by the new placement scores(s).
 2. Be required to take the course(s) indicated by the new placement test score(s) in addition to any others in the next term's schedule.
 3. Be restricted from registering for any College of DuPage courses for a semester or longer, as determined by the Dean of Students or designee.
 4. Be immediately withdrawn from any courses in which he or she might be enrolled currently, without refund of tuition or fees.
 5. Be immediately withdrawn from any courses in which he or she might be enrolled currently, with a letter attached to the transcript indicating that the student has been found to have violated the Code of Academic Conduct. This letter will remain in the student's file for a minimum of one year and a maximum of three years, as determined by the Dean of Students or designee.
 6. Be placed on extended disciplinary suspension from the College with a letter attached to the transcript indicating the student has been found to have violated the Code of Academic Conduct.
 7. This letter will remain in the student's file for up to five years, as determined by the Dean of Students or designee; the students must petition the Dean of Students to be re-admitted.
 8. If not a student at the time of the violation, be prevented from taking classes at College of DuPage for up to five years, and required to petition the Dean of Students to be admitted or re-admitted.
 9. In addition to, or instead of, any of the above, be subject to Disciplinary Loss of Privileges.
- A student may be required to participate in counseling, educational seminars or seek medical attention in lieu of, or in addition to, the imposition of sanctions.
 - More than one of the sanctions listed above may be imposed for any single violation.
 - Integrity violations which occur independent of a course or testing situation may have any of the preceding sanctions applied.
 - Other than College suspension, disciplinary sanctions will not be made part of the student's permanent academic record; however, they will

become part of the student's confidential record maintained by the Dean of Students.

Discipline Records

Except as specified above, disciplinary sanctions will not be made part of the student's permanent academic record, but will become part of the College of DuPage Judicial Database and the student's confidential record maintained by the Dean of Students' office. Ordinarily, cases involving the imposition of sanctions will be expunged automatically from the student's confidential record three years after final disposition of the case, except when the Dean of Students or designee has stipulated otherwise or the student has been placed on extended disciplinary probation for up to five years.

Appeal Rights and Process

A standing Judicial Review Board (described in Board Procedure 20-35) will hear cases and make recommendations on appropriate disciplinary cases referred to it by the Assistant Provost of Student Affairs. If, through a hearing, there is a finding that a student has violated the Code of Academic Conduct and sanctions have been imposed, that student has the right to appeal the finding(s) or sanction(s) or both.

A student who wishes to appeal the outcome of the hearing must do so within two business weeks of the date on the Hearing Outcome Form received from the Dean of Students or designee. The appeal must be addressed to the Assistant Provost of Student Affairs; it must be typewritten; and must state the grounds for appeal. If the student wishes to appear in person before the Judicial Review Board, this must be indicated in writing in the appeal letter. The Assistant Provost of Student Affairs will arrange a meeting convenient to all parties.

In the event of an appeal, the decision(s) of the Judicial Review Board as relayed by the Assistant Provost of Student Affairs will be final. In the event the student does not appeal within the required two-week period, the decision of the Dean of Students or designee will be final.

Prohibition of Discrimination, Harassment and Sexual Harassment (Board Policies 15-10 and 15-11)

No student, employee, Board member or visitor will discriminate against or harass a student, employee or visitor on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation or any other unlawful basis. The College will not tolerate discrimination or harassment. Individuals found to have violated this policy will be subject to disciplinary action up to and including termination and/or expulsion from the College as determined by such administrative or Board action as is required by Illinois law or by Board policy. Sexual harassment is illegal and violates state and federal laws. It is the policy of College of DuPage that no staff member or student shall be subject to sexual harassment. Student complaints should be filed with the: Affirmative Action Officer, Vice President of Human Resources, if against an employee; College of DuPage Police Department, if against a visitor; Dean of Students, if against a student.

Grievance Policy

Grievances may be categorized by appeal for the following reasons:

1. Discrimination because of race, color, sex, religion, national origin, ancestry, age, marital status, disability, unfavorable military discharge or sexual orientation in programs, courses, activities, facilities, financial aid or student employment.
2. Arbitrary and capricious grading

3. Disciplinary sanction
4. Academic regulations
5. Privacy of educational record

Efforts will be made to resolve the grievance at the point of origin. The following procedures should be followed in sequence:

1. Consult with the instructor, advisor, coordinator or person responsible for the area concerned.
2. Appeal to the director, associate dean, dean, associate vice president, or vice president for the area concerned.
3. Appeal to the appropriate board or individual: Academic Regulations Committee, Assistant Provost of Student Affairs for ADA Compliance issues, Judicial Review Board, Traffic Appeals Committee, or Financial Aid Committee.

Student Conduct and Disciplinary Procedures

Students as members of the academic community are expected and required to observe certain standards of behavior. Policies governing student conduct and disciplinary procedures can be found by contacting the Dean of Students' office at (630) 942-2485.

Student Complaint Process

It is the goal of the College of DuPage that any disagreements be discussed and resolved in a professional manner. When appropriate, attempts should be made to resolve the issue informally with the individual or department directly involved. If an issue or problem still exists, the following formal complaint process should be followed. All formal complaints must be put in writing using the online form at www.cod.edu/dean-of-students/student-complaint-process.aspx

NOTE: The Student Complaint Form does not apply to grade appeals; tuition appeals; violations of the Code of Student Conduct or Academic Conduct; or violations of discrimination, harassment and sexual harassment. Please refer to Student Rights and Responsibilities for procedures regarding these types of concerns or submit a Student Complaint form.

Student Complaint Process:

1. When appropriate, attempt to resolve the issue informally with the individual or office involved. If the situation remains unresolved, complete and submit the online form at <https://www.cod.edu/dean-of-students/student-complaint-process.aspx>
2. The completed form will be automatically forwarded to the Dean of Students Office, who will then disseminate the complaint to the appropriate college official.
3. The responsible college official will first investigate the complaint by interviewing the complainant and other involved parties. A written response (hard copy or email) will be sent to the student and the Dean of Students Office within five to ten business days of receiving the complaint.

In the event that the complaint remains unresolved, the complainant may contact the Dean of Students Office who will investigate and provide a written response to the appropriate individuals.

All formal complaints will be monitored to ensure action has been taken. A copy of the final resolution of any formal complaint will be forwarded to the Dean of Students Office where a record of all formal student complaints will be retained.

Communicable Diseases (Board Policy 20-10)

Students are to inform the Dean of Students' office if they have or are a carrier of a reportable Communicable disease as defined by the Illinois Department of Public Health (DPH). Upon being informed that a student is suspected of having a communicable disease, the Dean of Students may consult with appropriate College personnel, public health personnel, the College's legal counsel and the student. Pending determination, a student who has a reportable communicable disease, or is a carrier of a reportable communicable disease or a student who is reasonably suspected of having a reportable communicable disease or being a carrier, may be temporarily excluded from the College. For more information, contact the Dean of Students' office.

Student Appeals Procedures (Administrative Procedure 20-165)

Academic Regulations Committee

The committee considers student petitions regarding matters such as students' unresolved concerns about their academic records. The Academic Regulations Committee considers each case on its individual merits. Its decisions are final. An appeal to the Academic Regulations Committee is submitted through the Office of Student Records and must be for classes in which an "F" grade was received for a class taken less than five years before the petition is submitted.

Financial Aid Committee

The Financial Aid Committee, comprised of staff and faculty representatives, is responsible for the awarding of selective scholarships and for Financial Aid Standards of Academic Progress appeal reviews. Scholarship applications and Standards of Progress appeals must be submitted to the Office of Student Financial Aid by the posted deadlines. All decisions of the committee are final.

Judicial Review Board (Administrative Procedure 20-40)

The Judicial Review Board is comprised of faculty, staff and student representatives approved by the College President. This body conducts appeals from students who feel the college judicial officer did not provide a fair hearing during a disciplinary inquiry for violations of the Student Code of Conduct. An appeal to the Judicial Review Board is submitted through the Dean of Students' office.

Military Benefits Committee

The Military Benefits Committee, comprised of staff and faculty representatives, is responsible for the awarding of state and federal education benefits and for Veterans Standards of Academic Progress appeals reviews. Military education benefits certification requests and Standards of Academic Progress appeals must be submitted to the Veterans Services office by the established deadlines. All decisions of the committee are final.

Code of Academic Conduct

As members of the College of DuPage Community, we have expectations of both faculty and students. Thus, there must be a shared commitment to the highest standards of learning. Faculty and students have mutual responsibility for establishing a clear understanding of the importance of honest academic behavior and for practicing the College of DuPage values of Integrity, Honesty, Respect and Responsibility. Together we envision a positive learning environment that promotes the open exchange of ideas by practicing civility as defined in the Code of Student

Conduct and ethical learning behaviors as defined in the Code of Academic Conduct.

Violations

Violations of the Code of Academic Conduct are activities (observed or reported) or materials that are deceitful and dishonest. Violations of the Code will be reported and determined in accordance with the processes described in the procedures relating to academic integrity. Sanctions for violations of the Code will be based upon the nature of the violation and may include any of the sanctions in the procedures relating to academic integrity.

The objective of the Code of Academic Conduct is to sustain an environment in which students recognize and demonstrate the importance of being accountable for their academic behavior.

Students have the responsibility to:

1. Become fully knowledgeable of the Code of Academic Conduct;
2. Produce their own work;
3. Encourage honesty and integrity among their fellow students.

Faculty members have the responsibility to:

1. Review classroom expectations with respect to all aspects of academic honesty;
2. Describe those expectations clearly in the class syllabus;
3. Inform the student directly of any charges of academic dishonesty;
4. Apply Code of Academic Conduct Procedures in a consistent manner;
5. Determine the academic consequence of the student's academic dishonesty.

As members of the College Community, students are expected to refrain from academic dishonesty in all forms, including, but not limited to:

- **Cheating** – copying or attempting to copy from another student in any work submitted for evaluation, whether tests or assignments; intentionally using or attempting to use unauthorized materials, information or study aids; use of any unauthorized assistance, resources, materials or electronic/ cellular devices in taking quizzes, tests or examinations; altering graded work after it has been returned, then submitting the work to be re-graded.
- **Plagiarism** – the reproduction of ideas, words or statements of another person as one's own without acknowledgement, or use of an agency engaged in the selling of term papers or other academic materials.
- **Unauthorized Collaboration** – intentionally sharing or working together on an academic exercise when such actions are not approved by the course instructor.
- **Furnishing False Information** – intentional and unauthorized falsification or invention of any information or citation furnished to any College official, faculty member or office; misuse of identification with intent to defraud or deceive.
- **Facilitation of Academic Dishonesty** – permitting or attempting to help another violate the Code of Academic Conduct; alteration or sabotage of another student's work, such as tampering with laboratory experiments.
- **Abuse of Academic Materials** – Destroying, stealing or making inaccessible library, laboratory or other academic resource material, or attempting to do so; stealing or otherwise obtaining advance copies of placement tests; the acquisition, without permission, of a test or other academic material belonging to College of DuPage, to any department, or to any staff member; duplicating copyrighted

software without authorization or using such software on College computers; “hacking” on College computers or installing “virus” programs.

- **Bribes, Favors and Threats** – Bribing or attempting to bribe, promising favors to, or making threats against, any person with the intention of affecting an evaluation of a student's academic performance; conspiring with another person who then performs one of these acts on one's behalf.
- **Complicity in Academic Dishonesty** – Helping another commit an act of academic dishonesty, especially providing material or information to another person with knowledge that this will be used deceitfully in an academic evaluation activity; permitting one's own work to be submitted by another person as if it were that person's original work.
- **Falsification of Records and Official Documents** – Altering transcripts, grade reports or other documents affecting academic records; forging a signature of authorization or falsifying information on any academic document, such as permission forms, petitions or other documents.
- **Personal Misrepresentation and Proxy** – Taking another person's place in an exam, placement test or other academic activity, either before or after enrollment; having another person participate in an academic evaluation activity or evaluation in place of oneself.

Discovery of Irregularity

As part of their responsibilities, faculty members must make judgments about the academic performance of their students, with due regard for established standards of scholarship. During this process, a faculty member may discover that a student's activity or the material a student has submitted contains irregularities that appear to be violations of the Code of Academic Conduct. If no faculty is directly involved, such as in the Testing Center, the person who discovers the irregularity will notify their unit administrator, who will then be responsible for executing the Code of Academic Conduct duties normally assigned to the faculty member involved.

When an irregularity is discovered, the faculty member will notify the student as promptly as reasonably allows, either orally or electronically, and will by means of this notification provide the student with a timely opportunity to meet and discuss the irregularity.

Resolution of Complaint

At the conclusion of the meeting (referred as an Informal Hearing), or as soon thereafter as reasonably possible, the faculty member will inform the student of his or her determination. A student's failure to attend the meeting does not stop the process from going forward.

When a faculty member determines a violation has occurred but is unintended (e.g., the result of the student's misunderstanding of the assignment or ignorance of research conventions), then, rather than invoke the Code of Academic Conduct Violation procedure, the faculty might use the opportunity to advance the student's learning by requiring a corrected redo of the work in question. In such a case, the instructor may choose not impose any sanction.

These Learning Opportunities are to be settled between the faculty member and the student. No report to either the Division Associate Dean or the Dean of Students is necessary. If the student refuses the Learning Opportunity procedure, he/ she must be informed that, as a consequence, the instructor may choose to file a complaint alleging academic dishonesty with the Dean of Students. The Dean of Students will initiate a Formal Hearing with the student.

Sanctions

If, as a result of an Informal or Formal Hearing, it is determined that a violation of the Code has indeed occurred, sanctions will be imposed based upon the nature of the violation. Sanctions include, but are not limited to:

- Plagiarism remediation
- Disciplinary warning
- Disciplinary probation
- Disciplinary loss of privileges
- Withdrawal from class
- Limited access
- Disciplinary suspension
- Community service

Appeal Rights and Process

A standing Judicial Review Board (described in Board Procedure 20-35) will hear testimony and make recommendations on appropriate disciplinary cases referred to it by the Vice President of Student Affairs. If, through a Formal Judicial Hearing, there is a finding that a student has violated the Code of Academic Conduct and sanctions have been imposed, that student has the right to appeal the finding(s) or sanction(s) or both to the Judicial Review Board (JRB).

A student who wishes to appeal the outcome a Formal Judicial Hearing must do so within two business weeks of the date on the Hearing Outcome Form received from the Dean of Students or designee.

The appeal must be addressed to the Vice President of Student Affairs; it must be typewritten; and must state the grounds for appeal. If the student wishes to appear in person before the Judicial Review Board, this must be indicated in writing in the appeal letter. The Vice President of Student Affairs will arrange a meeting convenient to all parties.

In the event of an appeal, the decision(s) of the Judicial Review Board will be final. In the event the student does not appeal within the required two-week period, the decision of the Dean of Students or designee will be final.

The Code of Academic Conduct information above has been excerpted from Board Policy and Procedure 20-41. For the complete Policy and Procedure, contact the Dean of Students.

Traffic Appeals Committee

This committee, composed of staff and students, considers the appeals of students who feel they have been wrongly ticketed for traffic violations on campus. Appeal forms can be completed and submitted online at http://www.cod.edu/about/police_department/traffic_regulations.aspx.

Appeals must be made within five days of ticket issuance. Right of appeal is forfeited on the sixth day after the citation has been issued. The decision of the Traffic Appeals Committee is final.

ADA Compliance

Appeals regarding accessibility can be made to the Dean of Students, who serves as the ADA Compliance Officer. Recommendations regarding program and physical accessibility for qualified individuals with disabilities are handled by the Office of Access and Accommodations.

Student Privacy

Notification of Students' Rights Under The Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student's education records within 45 days of the day College of DuPage Office of Student Records receives a request for access. Students should submit to the Office of Student Records written requests that identify the record(s) they wish to inspect. The College will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes is inaccurate or misleading. Students may ask College of DuPage to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If College of DuPage decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information (not "Directory Information") contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor or collection agent); a person serving on the Board of Trustees; or a student assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
4. Students have the right to file a complaint with the U.S. Department of Education concerning alleged failures by College of DuPage to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:
Family Policy Compliance Office
U.S. Department of Education 400 Maryland Avenue, SW
Washington, D.C. 20202-4605

Student Email Policy

The student email policy is in effect upon a student's first registration for class(es). Dupage.edu student email accounts, Inside.cod.edu student portal, myACCESS student system, COD Alerts, and the College of DuPage website are the official College means of communication with students. Students must check regularly for targeted announcements and email communications. Students have the responsibility to recognize that certain communications are time-critical.

Computer Lab Security Policy

Numerous computing labs are available on campus for student use. Students who use these computing labs must comply with the COD Board of Trustees Policy Manual, Administrative Procedure 10-126, "Electronic Communications" guidelines. In addition to legal sanctions, violators of these guidelines may be subject to disciplinary action, including dismissal or expulsion, as relevant, consistent with other College policies, procedures or collective bargaining agreements.

Tobacco-Free Campus Policy (Board Policy 10-160)

Use of tobacco and tobacco-related products (including electronic cigarettes) is prohibited on all College of DuPage premises, in all indoor College facilities and in all College vehicles.

"College of DuPage premises" includes all land, building, facilities and other property leased or rented by the College, whether on a short-term or long-term basis; owned by the College (including adjacent streets and sidewalks); subject to the control of the College but not leased, rented or owned; and where an official College activity is held and where students, faculty or staff are present or are participants in the official College activity.

Tobacco use is permitted inside private vehicles. The improper disposal of tobacco and tobacco-related products from a vehicle while on College of DuPage premises is prohibited. Improper disposal includes, but is not limited to, spitting smokeless tobacco product, littering and anything that creates fire hazards.

It is the responsibility of all faculty, staff, students and visitors to comply with this policy. Refusal to comply with this policy may result in citations issued by Campus Police and/or disciplinary action by the appropriate administrative office.

Disclosure of Directory Information

The items listed below are designated as "Directory Information" by College of DuPage Board Policy and Procedure 20-15 and may be released for any purpose at the discretion of the College. Under provision of the Family Educational Rights and Privacy Act of 1974, as Amended, a student has the right to withhold the disclosure of any or all of the categories of "Directory Information" listed below. The student should consider very carefully the consequences of any decision to withhold "Directory Information." Should a student decide to inform the College not to release any or all of this "Directory Information," any future requests for such information from non-college persons or organizations will be refused. The College will honor a student's request to withhold the information listed below but cannot assume responsibility to contact the student for subsequent permission to release the information. Regardless of the effect upon the student, the College assumes no liability for honoring the student's instructions that such information be withheld.

Directory Information consists of the following: Name, community, terms attended, last educational institution attended, major field of study, awards, degrees and awards received, participation in officially recognized sports and activities, height and weight of members of athletic teams. If a student wishes to withhold the directory information, complete the "Student Request to Prevent Disclosure of Directory Information" form and submit it by the fourth week of the term to the Office of the Director of Enrollment Services and Registrar. Forms are available in the Office of Student Records. If the form is not received in the Office of the Director of Enrollment Services and Registrar by the

fourth week of the term, it is assumed that the above information may be disclosed.

Forms are available for students who wish to disclose non-directory information and are available in the Office of the Director of Enrollment Services and Registrar, the Office of Student Records, as well as various other offices. This form needs to be completed each term.

Printed Materials Guidelines

Individuals and organizations have the right to distribute printed material on the College of DuPage campus. Such material must not be contrary to local, state or federal laws and no items may be sold or money solicited. However, the Board does reserve the right to control the place, time and manner such printed material is distributed. The administrative procedures concerning the distribution of printed materials are available in the Office of Student Life, Student Services Center (SSC), and on the College website under Board Policies.

General Student Information

Bookstore

The campus Bookstore is located on the first floor of the Student Resource Center and carries all required textbooks for COD students. The Bookstore has textbook purchase options, including new, used, rental and a Price Match Program. Additional items and services include course materials, supplies, COD apparel and gift items, fax service, small copy services and free gift wrapping for any items purchased within the store.

Students who cannot visit the store to shop may shop anytime online at www.codbooks.com. Online orders for course materials and textbooks can easily be placed by using the course information on a student's schedule. Delivery options include shipping directly to home or free in-store pick up.

The Bookstore offers extended hours during the first week of classes each semester.

Day	Hours
Monday	7:45 a.m. - 7 p.m.
Tuesday	7:45 a.m. - 7 p.m.
Wednesday	7:45 a.m. - 7 p.m.
Thursday	7:45 a.m. - 7 p.m.
Friday	7:45 a.m. - 7 p.m.
Saturday	8:30 a.m. - 1 p.m.
Sunday	CLOSED

Closing the College—Severe Weather and Other Emergencies

In the event that it becomes necessary to close the campus or to cancel classes and other activities due to inclement weather, notices are sent out through the College's COD Alerts system via text, email and voice mail (sign up at www.getrave.com/login/cod). Announcements are also posted on the College's website at www.cod.edu, on the exterior LED signs, the student and employee portals, and on Facebook and Twitter. This closing information is also available on the College's incoming phone message at (630) 942-2800, through WDCB 90.9fm and on Chicago Tribune's Emergency Closing Center website

Dining Services

The campus Dining Services department offers an exciting and innovative dining program for the College of DuPage community. A variety of food

concepts, including national brands, are available to choose from. The E.E. Gibson Café is conveniently located on the first floor of the Student Resource Center with hours of operation during the academic year from 8 a.m. to 7 p.m., Monday to Thursday, and 8 a.m. to 2 p.m. on Friday. National-brand food venues are also located on the second floor of the Student Services Center (SSC), the first floor of the Technical Education Center (TEC), and the first floor of the McAninch Arts Center (MAC). Vending machines are located throughout the campus, and provide snacks and cold/hot beverages. For further information on food service or catering functions, contact Dining Services at (630) 942-2555.

College of DuPage Police Department

The College of DuPage Police Department is dedicated to providing exemplary police services, with the highest level of professionalism, to all community members. The College of DuPage Police Department is a full-service law enforcement agency that operates twenty-four hours a day, three hundred and sixty-five days a year, and is supported by certified and sworn police officers and support staff members.

The Police Department can be located in the Student Resource Center (SRC) 2100 and in the Homeland Security Education Center (HEC) 1040. The Department can also be reached by calling 630 942-2000.

Campus Parking

The parking lots on campus are available to faculty, staff, students and visitors. The College reserves the right to tow illegally parked vehicles at the owner's expense. Some designated parking areas require a parking permit. There is a 20 mph speed limit on all the entrance drives and roads around the campus and a 10 mph speed limit in all parking lots. Penalties for parking violations range from \$15 to \$250.

Fines may be paid by mail or in person to the Cashier's Office. To appeal a traffic citation, one must complete a Citation Appeal Form online at www.cod.edu/about/police_department/citation_appeal_form.aspx.

Public Transportation

Pace Suburban Bus Service provides bus transportation to and from the campus in Glen Ellyn. There are three bus stops on campus. One is on the southwest corner of Fawell Boulevard and Lambert Road near the Robert J. Miller Homeland Security Education Center (HEC), and there are two on Tallgrass Road on the north side* of the Student Resource Center (SRC) and the Berg Instructional Center (BIC). Two Pace routes serve the campus directly, No. 714 and No. 715. These routes connect with many others, as well as with the Metra and Northwestern train lines.

Please check the Pace website, www.pacebus.com or call (847) 364-PACE, for up-to-date schedules, fares and route maps.

All routes are subject to change. Pace schedules are available on campus at Campus Central, in the Office of Admissions and Outreach, and the Office of Student Life. Students may purchase a Pace Campus Connection Pass through Ventra. Details can be found at www.pacebus.com/campus-connection.

*The bus stop normally located at the north side of SRC on Tallgrass has been temporarily relocated to the south side of SRC at the pedestrian crosswalk between the SRC and HSC. This condition will exist through the fall 2020 semester and until further notice.

STUDENT LIFE AND LEADERSHIP OPPORTUNITIES

Academic Honor Societies

For information on the Honor Societies listed below, visit cod.presence.io/organizations (<https://cod.presence.io/organizations/>).

Alpha Beta Gamma

Alpha Beta Gamma is the International Business Honor Society of Community, Junior and Technical Colleges. College of DuPage is home to the Beta Iota chapter, chartered in 2006. The society recognizes and encourages students enrolled in business and business-related technology curricula and provides opportunities for leadership training, service, scholarship funds and the intellectual exchange of ideas. An invitation to join ABG reflects exceptional academic achievement.

Alpha Delta Nu

To promote scholarship and academic excellence in the profession of nursing, the Organization for Associate Degree Nursing (OADN), has established the Alpha Delta Nu Honor Society. The objective of the OADN shall be to recognize the academic excellence of students in the study of Associate Degree Nursing. The society shall encourage the pursuit of advanced degrees in the profession of nursing as well as continuing education as a life-long professional responsibility. Additionally, the society shall participate in the recruitment of qualified individuals into the profession of nursing.

Alpha Mu Gamma

Alpha Mu Gamma is the National Collegiate Foreign Language Honor Society of the United States. More than 300 chapters have been granted to chapters in the United States, Puerto Rico, and the Virgin Islands. Chapters are found both in state and private universities, and in public and private two- and four-year colleges. Alpha Mu Gamma Honor Society recognizes students who have achieved an outstanding record in the study of world language or ELS if the student's native language is not English.

Delta Psi Omega

Delta Psi Omega is the National Theatre Honors Society. Its purpose is to inspire interest in drama, theater and stage production. It gives students the chance to become involved with theater activities beyond the classroom.

Kappa Delta Pi

Kappa Delta Pi (KDP), International Honor Society in Education, was founded in 1911 to foster excellence in education and promote fellowship among those dedicated to teaching.

Lambda Epsilon Chi

The National Honor Society in Paralegal Studies, Lambda Epsilon Chi, recognizes significant achievement of students in College of DuPage's Paralegal program, and recognizes members who broaden their academic experience beyond the classroom. An annual induction ceremony will be held to welcome new inductees.

Omega Lambda Nu

Omega Lambda Nu, is the National Honors Society for Radiologic and Imaging Services. Lambda Nu is committed to: fostering academic

scholarship at the highest academic levels, promoting research and investigation in the radiologic and imaging sciences, and recognizing exemplary scholarship.

Phi Theta Kappa

Phi Theta Kappa, the International Honor Society for two-year colleges, is very active on the local, regional and international levels. Any student may participate in the activities of this organization; however to gain full membership in the society, students must have 12 cumulative hours with a 3.5 cumulative GPA. A one-time membership fee is required. The Phi Beta chapter at College of DuPage implements a full range of activities in the society's hallmarks of leadership, scholarship, fellowship and service.

Psi Beta

Psi Beta is the National Honor Society in Psychology for community and junior colleges. The mission of Psi Beta is professional development of Psychology students through promotion and recognition of excellence in scholarship, leadership, research and community service.

SALUTE Veterans National Honor Society

SALUTE is the only national honor society in the nation recognizing and honoring the service and the scholastic achievements of this generation's greatest veterans.

Tau Upsilon Alpha

Tau Upsilon Alpha Honor Society is the national Human Services Honor Society. The mission of Tau Upsilon Alpha is to honor academic excellence, foster lifelong learning, leadership development and promote excellence in service to humanity.

Fine and Applied Arts Performances and Exhibits

The McAninch Arts Center (MAC) is a premiere arts education facility and Performing Arts venue in the region. The MAC presents more than 300 events annually and is home to the Fine and Applied Arts programs at College of DuPage. It has four performance spaces: the 800-seat Belushi Performance Hall, the 200-seat Playhouse Theatre, the 70-seat Studio Theatre, and the 1,200-seat outdoor Lakeside Pavilion. The MAC program also offers the Cleve Carney Museum of Art, Techcetera Gallery and Wings Gallery, and offers a comprehensive arts curriculum within the visual and performing arts.

The 165,000 square-foot facility houses state-of-the-art classrooms, studios, labs, performance and exhibition space that support study in Studio Art, Ceramics, Jewelry, Graphic Design, Mass Communication, Motion Picture/Television, Photography, Music, Theater and Dance. The MAC hosts a series of professional touring artists, and two professional companies in residence, the New Philharmonic Orchestra and the Buffalo Theatre Ensemble, as well as student performance and exhibition events.

For information about MAC programming and opportunities to participate, call (630) 942-3008 or visit atthemac.org (<http://www.atthemac.org>) for performance information.

Cleve Carney Museum of Art

The Cleve Carney Art Gallery is a 3,000 square-foot art space dedicated to the exploration and exhibition of contemporary art by regional, national and international artists. The space annually hosts both faculty and student art shows. The gallery is free and open to the public throughout

the academic year and hosts one large international exhibition that is ticketed in the summer.

Wings Gallery

The Wings Student Art Gallery provides a venue for College of DuPage art students to pursue cultural practices that reflect the ideas and concepts of contemporary art. Located in Room 2210 in the Student Services Center (SSC), the gallery is free and open to the public.

Techcetera Gallery

The Techcetera Student Gallery provides a venue for College of DuPage design and technology students to present creatively designed coursework not routinely presented as "art." Located in Room 2211 in the Student Services Center (SSC), the gallery is free and open to the public.

Dance

College Dance offers dance performances and classes each semester showcasing the work of imaginative student choreographers as well as faculty and guest choreographers. Fall Dance Fusion showcases a variety of dance styles and the Spring Dance Concert features choreography by dance faculty and selected student choreographers.

Theater

The Theater program presents five theatrical productions and one musical each summer, and provides students with the opportunity to study acting, directing, history and all elements of theater production. Students participate in fully staged and designed theatrical productions in fall, spring and summer terms. Productions are supported with the high technical and production values that a professional art center can offer with a costume and scenic designer in residence to support these productions. Auditions are held at the beginning of each academic term and are open to students and community members.

College Music

The Music program provides students with the opportunity to study music appreciation, music theory and history, world music, and digital recording/editing. Students may participate in a variety of music ensembles and participate in individualized or group study in voice and instruments. Student ensembles perform in the professional spaces and are supported by high technical production and sound standards that a professional performing arts center can offer. Select ensembles require an audition to participate.

- Chamber Singers is a 25- to 30-singer ensemble performing madrigals, world and a cappella music from five centuries.
- Concert Choir is a 50- to 70-singer choir performing mixed repertoire.
- DuPage Chorale performs choral masterworks, featuring soloists with instrumental accompaniment, and is open to all students and community members.
- Chamber Orchestra performs classical repertoire and is open to all students.
- DuPage Community Concert Band performs a wide range of band repertoire and is open to all students and community members.
- Percussion Ensemble studies and performs repertoire written specifically for percussion instruments as well as transcriptions adaptable to percussion.
- DuPage Community Jazz Ensemble is a 20-plus-piece big band dedicated to performing original music and jazz classics and is open to all students and community members.

- Small Group Jazz Ensemble is an instrumental ensemble, performing top-shelf material from the first century of jazz history.
- Guitar Ensemble is a large guitar ensemble performing 20th century American music.

Athletics

College of DuPage participates in the National Junior College Athletic Association (NJCAA) within Region 4, which consists of 34 like institutions throughout the Chicagoland and Wisconsin areas. College of DuPage has one of the most successful community college athletic programs in the nation, winning numerous national, district and regional championships in various sports. In the past four years, the College of DuPage has won an impressive 10 National Championships, two Daktronics Cup (Best Non-Scholarship Institution), and in 2022-2023 won the NACDA Learfield Directors Cup awarded to the best junior college athletic department in the country.

Intercollegiate sports for men include baseball, basketball, cross country, football, golf, half-marathon, soccer, tennis, volleyball, lacrosse and track and field. College of DuPage has women's teams in basketball, cross-country, flag football, golf, soccer, softball, tennis, track and field and volleyball. The College of DuPage also has a Esports team that competes in a variety of games.

Students who zipped around the district to temporary classrooms when the College opened in 1967 reminded someone of roadrunners; hence, the chaparral, a type of roadrunner, became the school mascot. The College colors are forest green and silver.

Recreation

Physical Fitness classes, activities including swimming and a full fitness center are also offered to provide students, faculty and staff the opportunity to participate in a variety recreational sports activities. For more information call the Chaparral Fitness at (630) 942-2633, or visit gochapsgo.com (<https://gochapsgo.com/>).

Forensics Team

The Forensics team at College of DuPage is one of the most competitive speech and debate teams in Illinois. As many as 30 students participate in the program, which includes readers' theater, public address, debate, oral interpretation and acting. Teams compete in tournaments against other community colleges and universities throughout the state and nation. The Forensics teams has won numerous national championships and has ranked in the top 10 in the nation each of the past 20 years. Beginners as well as seasoned performers are welcome. For more information, call (630) 942-2175 or email abelnk@cod.edu.

Leadership Programs

Living Leadership Program

The Living Leadership Program is a free program focused on developing students into active leaders. Living Leadership students build personal portfolios while developing the skills necessary to lead others. Students participate in workshops, retreats and clubs, and give back to the community through service. Students can join any time and are encouraged to visit the Living Leadership website for the most current program information: [cod.edu/LivingLeadership](https://www.cod.edu/LivingLeadership) (<https://www.cod.edu/LivingLeadership/>).

Orientation Leader Program

The Orientation Leader (OL) Program is a combination of a scholarship and leadership development opportunity. OL's serve as role models as well as sources of support and information for new first-time students with the goal of making the transition to COD easier and exciting. An Orientation Leader has the opportunity to earn a scholarship, make new friends, as well as gain and develop leadership skills. Trainings are designed to provide OL's with important skills for NSO and life. OL's are trained in leadership development, team building, creating lasting connections, diversity/inclusiveness, identifying strengths, mental health awareness, and small group communication. Visit the Orientation Leader page at cod.edu/ol for more information or to link to the application. You can also visit our page on ChapLife at chaplifecod.edu (<https://cod.presence.io/>).

Student Academic Publications

The Prairie Light Review

The Prairie Light Review is the liberal arts magazine for College of DuPage. It publishes original poetry, prose, graphic narratives, music lyrics, photography and art from students, staff and community members from District 502. To work on the magazine, students enroll in English 2210, a two-credit hour class, where they evaluate submissions, work on layout and handle publicity. For additional information, contact the Prairie Light Review office at (630) 942-2733 or visit cod.edu/plr (<https://www.cod.edu/plr/>).

ESSAI

Michel de Montaigne, the great 16th-century French philosopher and writer, created a new literary genre called "essays" to demonstrate his attempts or trials in his writing exercises. The award-winning ESSAI reflects Montaigne's seminal design and annually publishes some of the best academic "trials" and "attempts" of College of DuPage students' writing endeavors across the curriculum and at all levels of learning. A professor selects and nominates a paper to the editors of ESSAI for consideration for publication. Each journal's volume includes a variety of written assignments and exemplifies the special talent, fresh scholarship and intellectual sophistication of College of DuPage students.

Courier Student Newspaper

A perennial award-winner for content and design, the Courier student newspaper can be found on racks throughout campus, via a weekly email newsletter, on social media, podcasts, and at www.codcourier.org. Editors, reporters, designers, podcasters and video/photojournalists work in paid positions to produce a weekly publication during the fall and spring semesters. The Courier is also available online during the summer semester. Freelance opportunities are available for aspiring writers, designers, videographers, photographers, cartoonists and podcasters. For more information, contact editor@cod.edu

Student Clubs

College of DuPage has vast selection of student clubs that provide opportunities for students to interact through a connection with academic programs, topical interest sharing, leisure-time activities and social interaction. Practicing leadership, business and organizational skills outside of the classroom enhances students' life and career goals. For a list and description of student clubs and organizations, visit chaplifecod.edu (<https://cod.presence.io/>).

Chaparral Life

Chaparral Life at chaplifecod.edu (<http://chaplifecod.edu>) is how the Office of Student Life can help you make your college experience one of a kind. Get involved in one of our various student clubs, learn about leadership development on campus, discover the services we provide, and keep track of all the outstanding events on campus. It's your student life, so come see the possibilities and get ready for an experience you won't forget.

Fuel Pantry

The Fuel Pantry provides free food and personal care items to all currently enrolled (full or part time) COD students with a self-identified need. We're located at the main Glen Ellyn campus, but open to students from any of the COD campuses. We believe access to food is essential to academic success, so we work hard to address food insecurity at COD. Simply register at the pantry (SRC 1000) on your first visit and then you are welcome to shop once a week. The Fuel Pantry is here to help students "make ends meet!"

Student Leadership Council

The Student Leadership Council represents the student body to the administration and provides a place for students to become involved in the college community. The Student Leadership Council provides students an opportunity to offer input and voice opinions, as well as work on service projects and campus-wide initiatives. Students may also serve on college committees, such as Dining Services, Bookstore, Traffic Appeals and others. Interested students are encouraged to contact the Student Leadership Council office in the Student Services Center (SSC), or call (630) 942-2718.

Chaparral Activities Board (CAB)

Chaparral Activities Board (CAB) is the College's student programming board. Chaparral Activities Board represents activities and events that students would like to see on campus. They provide entertainment, events and social opportunities. CAB creates community on campus and provides students with the opportunity to connect with each other. Students can serve as members of the CAB Leadership Team and learn more about planning/managing events, negotiating contracts, contracting artists, creating marketing, managing marketing on social media platforms, and working as a team. Interested students are encouraged to contact the Chaparral Activities Board in the Student Services Center (SSC), or call (630) 942-2243. You can also find more information on ChapLife at chaplifecod.edu (<https://cod.presence.io/>).

Reserve Officers' Training Corps (ROTC)

ROTC is a college elective for College of DuPage students that provides unrivaled leadership training for success in any career field. ROTC is the process by which a college student with an interest in military service can be provided with the skills, education and training required to serve as an officer in the United States military.

Army ROTC

Students that complete the AROTC program through College of DuPage have the ability to transfer to a partner university, where they can complete their baccalaureate degree, as well as the last two years of their AROTC training. Upon successful completion of their studies, students may earn a college degree as well as a commission in the United States Army, National Guard, or United States Army Reserve. AROTC cadets complete full-time coursework at College of DuPage and receive military

training at Wheaton College, home of the Rolling Thunder Battalion. Upon transfer, students may select one of the many options available to them to continue their major and AROTC studies.

Air Force ROTC

The Air Force Reserve Officer Training Corps (AFROTC) is a leadership development program that prepares college students to become officers in the U.S. Air Force and U.S. Space Force. Through hands-on training, academic coursework, and physical fitness, cadets develop the skills necessary to lead and commission as officers upon graduation.

The College of DuPage AFROTC program is hosted by Detachment 195 at the University of Chicago. Learn more about the program and take your first step as a College of DuPage student toward a future of service and leadership by visiting the detachment's website (<https://collegeadmissions.uchicago.edu/afrotc/>).

For more information, contact the Veterans Services Office at veterans@cod.edu or (630) 942-3814.

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Accountancy (ACCOU)

ACCOU 1000

Bookkeeping Principles - A Practical Focus

2 Credit Hours

This course introduces bookkeeping principles for service companies, focusing on foundational bookkeeping skills. Covers key areas such as recording transactions, tracking income and expenses, and generating financial reports. The course also provides an introduction to using accounting software and managing payroll. (2 lecture hours)

ACCOU 1110

Accounting Procedures

3 Credit Hours

The accounting cycles of service organizations and merchandisers focusing on the recording of business transactions and the preparation of financial statements for such organizations. Includes specific accounting concepts relating to current assets, long-term assets, current liabilities, payroll and the operations of corporations. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ACCOU 1120

Income Tax Fundamentals

2 Credit Hours

Introduction to fundamentals of income taxation for individuals. Students will explore the structure of the U.S. tax system, income, deductions, credits, and filing requirements. (2 lecture hours)

Prerequisite: ACCOU 1110 or ACCOU 2140, or equivalent, or consent of instructor.

ACCOU 1160

Payroll Accounting

3 Credit Hours

This course introduces federal and state laws pertaining to wages, payroll taxes, payroll tax forms, journal and general ledger transactions. Emphasis is placed on computing wages, calculating social security, income, and unemployment taxes, preparing appropriate payroll tax forms, and journalizing/posting transactions. (3 lecture hours)

Prerequisite: ACCOU 1110 or equivalent or ACCOU 2140 or equivalent or consent of instructor.

ACCOU 1175

Accounting with QuickBooks

3 Credit Hours

Develops understanding of general ledger accounting software using QuickBooks. Includes company setup, chart of accounts, recording transactions, managing lists, generating and customizing reports and forms. This course covers content on the QuickBooks Certified User Exam. (2 lecture hours, 2 lab hours)

Prerequisite: ACCOU 1110 or equivalent or ACCOU 2140 or equivalent or consent of the instructor.

ACCOU 1176

QuickBooks Online

2 Credit Hours

Develops understanding of general ledger accounting software using QuickBooks Online. Covers company setup, chart of accounts, transaction recording, list management, and reports and forms. Course prepares students for the QuickBooks Online User Certification Exam. (1 lecture hour, 2 lab hours)

Prerequisite: ACCOU 1110 or equivalent or ACCOU 2140 or equivalent or consent of instructor.

ACCOU 1186

Applications of QuickBooks Online

2 Credit Hours

Explores practical applications of QuickBooks Online for essential accounting functions. Students will learn to perform bank reconciliations, create tax documents, and process payroll information. The course also covers the creation of financial reports, equipping students with the skills needed to support accounting departments. (2 lecture hours)

Prerequisite: ACCOU 1176 or equivalent or consent of instructor.

ACCOU 1820

Selected Topics I

1-6 Credit Hours

Introductory exploration and analysis of selected topics related to accounting with a specific theme indicated by course title listed in college course schedule. (1 to 6 lecture hours)

ACCOU 1840

Independent Study

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

ACCOU 2140 (BUS 903)

Financial Accounting

4 Credit Hours

An introduction to financial accounting concepts. A study of the accounting cycles of service organizations and merchandisers. Emphasizes the recording of business transactions and the preparation of financial statements. Emphasis is also placed on the accounting principles relating to the measurement, valuation, reporting and internal controls. (4 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ACCOU 2150 (BUS 904)

Managerial Accounting

4 Credit Hours

An introduction to managerial accounting and cost concepts. A study of the accounting cycle of manufacturers emphasizing the recording of business transactions relating to the manufacture of inventory and the preparation of financial statements. Emphasis is also placed on analysis of cost behavior, budgeting concepts, standard cost systems and variance analysis, and the use of accounting information to make decisions. (4 lecture hours)

Prerequisite: ACCOU 2140 or consent of instructor.

ACCOU 2160

Introductory Data Analytics for Accounting

3 Credit Hours

An introduction to the basic data analytics tools utilized to acquire, organize, synthesize and analyze accounting data. Explores the role of financial and non-financial information in supporting the decision making process. The fundamental principles and practices of data visualization are also introduced. (3 lecture hours)

Prerequisite: ACCOU 1110 or ACCOU 2140 or equivalent, or consent of instructor.

ACCOU 2200***Income Tax Return Preparation***

3 Credit Hours

Introduces individual income tax return preparation emphasizing the completion of basic tax returns. Resources are provided under the Volunteer Income Tax Assistance (VITA) program which is administered by the Internal Revenue Service. (1 lecture hour, 4 lab hours)

Prerequisite: ACCOU 1110 or ACCOU 2140 or equivalent or consent of instructor.

ACCOU 2201***Income Tax Preparation II***

3 Credit Hours

Examines advanced individual income tax return preparation procedures emphasizing the completion of individual federal and state tax returns. The administrative procedures for tax return filing, multi-state filings and part-year resident filings are also covered. Resources are provided under the Volunteer Income Tax Assistance (VITA) program which is administered by the Internal Revenue Service. (1 lecture hour, 4 lab hours)

Prerequisite: ACCOU 2200 with a grade of C or better or equivalent.

ACCOU 2205***Federal Taxation I***

4 Credit Hours

Introduces Federal income tax concepts relating to individuals and sole proprietorships. Includes federal tax processes, procedures, legal duties, and responsibilities that govern practice before the IRS. (4 lecture hours)

Prerequisite: ACCOU 2140 or consent of instructor.

ACCOU 2206***Federal Taxation II***

4 Credit Hours

Federal income tax concepts relating to corporations, partnerships, S-corporations, and trusts. Also includes the tax consequences of state and local, and international transactions. (4 lecture hours)

Prerequisite: ACCOU 2205 or equivalent or consent of instructor.

ACCOU 2241***Intermediate Accounting I***

4 Credit Hours

In-depth study of the theory and concepts of accounting emphasizing financial statements, present value concepts and the accounting for cash, receivables, inventory, plant assets, intangible assets, current liabilities, and contingencies. (4 lecture hours)

Prerequisite: ACCOU 2140 or equivalent or consent of instructor.

ACCOU 2242***Intermediate Accounting II***

4 Credit Hours

In-depth study of the theory and concepts of accounting emphasizing the measurement, recognition, and valuation of investments, long-term liabilities, and stockholders' equity. Topics include corporate investments in securities, revenue recognition, postretirement benefits, leases, interperiod tax allocations, accounting changes, full disclosure, ratio analysis, and the preparation and presentation of the statement of cash flows. (4 lecture hours)

Prerequisite: ACCOU 2241 or equivalent or consent of instructor.

ACCOU 2251***Cost Accounting***

3 Credit Hours

In-depth study of methods used by managers for decision making, budgeting, and performance evaluation. Emphasizes cost accounting systems and procedures for data accumulation and cost control. (3 lecture hours)

Prerequisite: ACCOU 2150 or equivalent or consent of instructor.

ACCOU 2260***Advanced Accounting***

3 Credit Hours

In-depth study of the accounting and reporting issues related to consolidated financial statements with an emphasis on consolidation theory, procedures for eliminating various intercompany transactions, and accounting for business combinations. Other topics include partnership accounting, international operations and corporate insolvency. ACCOU 2242 or equivalent is recommended prior to enrollment. (3 lecture hours)

ACCOU 2265***Governmental & Not-For-Profit Accounting***

3 Credit Hours

In-depth study of governmental and not-for-profit entity theory, practice and reporting issues. Emphasis on accounting principles relating to governmental agencies, colleges and universities, health care and not-for-profit organizations. Completion of ACCOU 2241 is recommended prior to enrollment. (3 lecture hours)

ACCOU 2271***Auditing I***

3 Credit Hours

An introduction to the role of the public accountant, professional standards, attestation and other assurance services, audit evidence and documentation, and reports on audited financial statements, with particular emphasis on the auditor's decision-making process by integrating coverage of the components of audit risk with tests of controls and substantive tests that relate to selected transaction cycles. ACCOU 2241 or equivalent is recommended prior to enrollment. (3 lecture hours)

ACCOU 2272***Auditing II***

3 Credit Hours

Continued study of auditing and assurance services. Emphasizing professional standards, ethics, legal liability, and regulation of the public accounting profession. Internal controls, components of audit risk, tests of controls, substantive tests, reporting, and audit sampling applications are also examined. (3 lecture hours)

Prerequisite: ACCOU 2271 or equivalent or consent of instructor.

ACCOU 2280***Forensic Accounting-Fraud Examination***

3 Credit Hours

Introduction to financial fraud including analysis of major fraud schemes, investigative strategies, and financial controls. Emphasis on detection and prevention of financial fraud in the organization. Completion of ACCOU 2241 or equivalent is recommended prior to enrollment. (4 lecture hours)

ACCOU 2290***Accounting Research***

3 Credit Hours

This course examines research methods, procedures and tools used to analyze and communicate research findings on technical research questions in taxation, financial accounting, and auditing. Topics include: research process, analysis, application of authoritative guidance, and communication. (3 lecture hours)

ACCOU 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ACCOU 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career & Technical Ed). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ACCOU 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Adult Basic Education (ABE)

ABE 0700***Reading Skills Development I***

3 Credit Hours

Introduces basic word recognition and word attack skills including pre-reading skills, sight words, phonics skills and structural analysis skills; comprehension and advanced reading skills in relation to words, sentences, selections and sequence; specialized skills in locating and organizing information, reading maps, interpreting graphs, tables or diagrams; and the development of personal reading skills. Mandatory testing. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Consent of instructor is required.

ABE 0701***Reading Skills Development II***

3 Credit Hours

Reinforces and reviews basic word recognition and word attack skills including pre-reading skills, sight words, phonics skills and structural analysis skills; comprehension and advanced reading skills in relation to words, sentences, selections and sequence; specialized skills in locating and organizing information, reading maps, interpreting graphs, tables or diagrams; and the development of personal reading skills. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Consent of instructor is required.

ABE 0702***Pre-GED Reading Skills I***

3 Credit Hours

Reinforces and reviews word recognition and word attack skills of structural analysis; comprehension and advanced reading skills including deriving meaning from words, sentences, selections and identifying sequence; specialized reading skills including locating and organizing information, reading maps and interpreting graphs, tables or diagrams. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Consent of instructor is required.

ABE 0703***Pre-GED Reading Skills II***

3 Credit Hours

Introduces personal reading skills and reading in the social studies and science content area. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Consent of instructor is required.

ABE 0710***Basic English Skills I***

3 Credit Hours

Introduces basic English grammar and usage, spelling/vocabulary/dictionary use, capitalization and punctuation. Mandatory testing. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Consent of instructor is required.

ABE 0711***Basic English Skills II***

3 Credit Hours

Expands knowledge of English grammar, usage, and sentence structure, and includes composition of English paragraphs and essays. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Mandatory testing and consent of instructor is required.

ABE 0720***Basic Mathematical Skills I***

3 Credit Hours

Introduces basic arithmetic skills including the fundamental operations with whole numbers, decimals, fractions and mixed numbers; verbal reasoning; and measurement systems. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Consent of instructor is required.

ABE 0721***Pre-GED Mathematical Skills II***

3 Credit Hours

Reviews arithmetic skills including the fundamental operations with decimals, fractions, and mixed numbers; verbal reasoning; and measurement systems. Introduces percents, ratio and proportion, and charts and graphs. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Consent of instructor is required.

Adult Secondary Education (ASE)

ASE 0840***Citizenship Preparation***

2 Credit Hours

Intended for individuals preparing for naturalization and for successfully completing the oral interview and written test required for U.S. citizenship. The course provides an overview of significant historical events; facts and concepts of federal, state and local government; current political, governmental and social information; and explanations of United States' culture and institutions. The naturalization process and the One Hundred Questions developed by the Bureau of Citizenship and Immigration Services (BCIS) are also covered. This course may be taken four times for credit. This course can only be taken on a pass/fail basis. (2 lecture hours)

Prerequisite: Consent of instructor is required.

Anatomy and Physiology (ANAT)

ANAT 1500***Survey of Human Anatomy and Physiology***

4 Credit Hours

Essential principles of human anatomy and physiology are presented, including histology and the function of major organ systems. This course provides an introduction to the human body in one semester and is intended for students in certain allied health and social service programs. **** Note **** This course will NOT count towards the Life Science requirement in the AA, AS, AFA or AAT degrees. (3 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Category One.

BIOLO 1100 is strongly recommended.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 1551***Human Anatomy and Physiology I***

4 Credit Hours

First semester of a two-semester sequence focusing on the structure and function of the human body and its mechanisms for maintaining homeostasis. Course topics include the study of cell biology, histology, and the integumentary, skeletal, muscular and nervous systems as well as the special senses. This course is intended to be an alternative to ANAT 1571; credit toward graduation will be granted for ANAT 1551 or ANAT 1571, but not for both. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better, or a qualifying score on the mathematics placement test, or a qualifying ACT or SAT math sub-score. Course requires Reading Placement Category One. BIOLO 1151 (Principles of Biological Science) or HLTHS 1110 (Biomedical Terminology) is strongly recommended.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 1552***Human Anatomy and Physiology II***

4 Credit Hours

Continuation of the study of the structure and function of the human body and the mechanisms for maintaining homeostasis within it. The endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems, as well as the concepts of development, metabolism, fluid and electrolyte balance, and acid-base balance are included. Course is intended to be an alternative to ANAT 1572; credit toward graduation will be granted for ANAT 1552 or ANAT 1572 but not for both. (3 lecture hours, 3 lab hours)

Prerequisite: ANAT 1551 or ANAT 1571, with a grade of C or better.

Course requires Reading Placement Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 1571***Anatomy and Physiology With Cadaver I***

4 Credit Hours

First semester of a two-semester sequence focusing on the structure and function of the human body and its mechanisms for maintaining homeostasis. Course topics include the study of cell biology, histology, and the integumentary, skeletal, muscular and nervous systems as well as the special senses. Identification of anatomical structures on Cadavers will be required for the laboratory. This course is intended to be an alternative to ANAT 1551; credit toward graduation will be granted for ANAT 1551 or ANAT 1571, but not for both. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better, or a qualifying score on the mathematics placement test, or a qualifying ACT or SAT math sub-score. Course requires Reading Placement Category One. BIOL 1151 (Principles of Biological Science) or HLTHS 1110 (Biomedical Terminology) is strongly recommended.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 1572***Anatomy and Physiology With Cadaver II***

4 Credit Hours

Continuation of the study of the structure and function of the human body and the mechanisms for maintaining homeostasis within it. The endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems, as well as the concepts of development, metabolism, fluid and electrolyte balance, and acid-base balance are included. Identification of anatomical structures on cadavers will be required in the laboratory. Course is intended to be an alternative to ANAT 1552; credit toward graduation will be granted for ANAT 1552 or ANAT 1572 but not for both. (3 lecture hours, 3 lab hours)

Prerequisite: ANAT 1551 or ANAT 1571, with a grade of C or better.

Course requires Reading Placement Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 1820***Selected Topics I***

3 Credit Hours

Introductory exploration and analysis of selected topics in anatomy and physiology with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 1821***Selected Topics II***

3 Credit Hours

Introductory exploration and analysis of selected topics in anatomy and physiology with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within anatomy and physiology to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

ANAT 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 tgo 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

Anthropology (ANTHR)

ANTHR 1000 (S1 900N)***Introduction to Anthropology***

3 Credit Hours

Introduces students to the four primary sub-fields of anthropology as well as the applications of anthropological work in addressing domestic, international, and cross-cultural issues and dilemmas. Emphasis is placed on the complementary and interrelated nature of archaeology, cultural anthropology, biological anthropology, and linguistic anthropology. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ANTHR 1100 (S1 901N)***Cultural Anthropology***

3 Credit Hours

Introduces cultural anthropology as a subfield of anthropology that studies contemporary societies. Focuses on patterns in human behavior and on culture as the way people live and adapt to their various situations. Emphasis is on the diversity of cultural patterns throughout the world and the essential humanity of all people. Examples from a wide variety of cultures are presented in a variety of formats. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ANTHR 1105 (S1 904D)***Practical Anthropology***

3 Credit Hours

Concentrates on how concepts, techniques and information from anthropology can be applied to helping people solve their problems and improve their lives. Emphasizes the relevance of anthropology to development issues and to concerns of many career fields such as business, medicine, social work, teaching and management. Course examples are drawn from diverse parts of the world. Individual project(s) relate to students' interests and/or careers. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ANTHR 1110***Business Anthropology***

3 Credit Hours

Holistic approach to economic systems examining how family, language, religion, class, education and gender roles inform economic practices. Emphasis on the diversity of cultural patterns throughout the world and the essential humanity of all people. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 1130 (S1 904D)***People and Cultures of the World***

3 Credit Hours

An introductory exploration of specific populations and cultures in different areas of the world today, focusing on interaction between a society's culture and its environmental, demographic, and historical conditions. Emphasis on the areas of subsistence, religion, and/or urbanization/complexity. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ANTHR 1200 (S1 903)***Discovering Archaeology***

3 Credit Hours

Introduces archaeology as a subfield of anthropology that studies humanity's prehistory, history and present through the study of material remains and the archaeological record of human development. Emphasis is placed on what archaeologists do and the science of archaeology. (2 lecture hours, 2 lab hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 1210***Ancient Civilizations and Societies***

3 Credit Hours

Explores the emergence of human societies and civilizations through archaeology. This course covers major landmarks in the development of human civilizations including the emergence of humankind, the development of agriculture, urbanism, and the high civilizations of antiquity. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 1300***Language and Culture***

3 Credit Hours

Introduces Linguistic Anthropology as a subfield of Anthropology that explores how humans communicate. Focuses on language as the basis for social relations and culture. Emphasis is on the similarities and differences of human languages, the cognitive basis for language, the formation of communication systems, and the adaptive use of those systems in human societies. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 1400 (S1 902)***Race, Sex and Human Evolution***

3 Credit Hours

Introduces the field of physical anthropology, sometimes known as biological anthropology. Topics include the scientific foundations for studying race and human variation as well as popular misconceptions about human genetic diversity; primatology, including a survey of living primate forms; evolutionary theory, the fossil record and the development of humans; and humanity's place in world ecology. Introduces forensic anthropology. Includes laboratory work centered on these topics and skeletal biology. (2 lecture hours, 2 lab hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ANTHR 1410***Evolution of Human Sexual Behavior***

3 Credit Hours

Introduces human sex and sexuality from an evolutionary perspective. Explores how evolution has shaped the bodies, behaviors, and nature of modern humans as sexual beings. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ANTHR 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.).

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2100***Introduction to Anthropological Methods***

4 Credit Hours

Introduces anthropological methods with an applied focus to study contemporary societies and addresses contemporary problems. Utilizes ethnography, case studies, cultural mapping interviews, textual analysis, observations, participant observation, ethology, focus groups, and other techniques. Students develop a keen awareness of cultural issues in research. (4 lecture hours)

Prerequisite: ANTHR 1000, ANTHR 1100, or ANTHR 1105, all with a grade of C or better, or equivalent or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2150***Culture and the Mind***

3 Credit Hours

Introduces an evolutionary approach to the understanding of how human nature was shaped in the Pleistocene Era and continues to have profound influences on contemporary behavior. Focuses on the evolution of traits that serve as the basis for human adaptations imposed by the needs related to subsistence, safety, sex, and sociality. Emphasis is on the role of culture and language as selective pressures in their own right, the evolved mental domains that have served our species, the basis for these adaptations, and the biological platforms for these systems. (3 lecture hours)

Prerequisite: PSYCH 1100 with a grade of D or better, or equivalent or consent of instructor. ANTHR 1000 and ANTHR 1400 are recommended.

ANTHR 2200***Introduction to Anthropological Methods***

4 Credit Hours

Provides an overview of the major methods of field work and research design in anthropology and related social and behavioral sciences. Students will analyze one or more topics using appropriate qualitative and quantitative methodological techniques. Some field work may be required. (2 lecture hours, 4 lab hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2210***Field Experience/Applied Anthropology***

4 Credit Hours

Introduces students to experiential-based learning of anthropological methods with an applied focus to study contemporary societies. Provides a framework for implementing the methods designed in the Introduction to Anthropological Methods course. (8 lab hours)

Prerequisite: ANTHR 2100 with a grade of C or better, or equivalent and BUSIN 1100 with a grade of C or better, or equivalent or consent of instructor

ANTHR 2240***Field Work Archaeology***

3 Credit Hours

Introduces the techniques and theory of field archaeology through actual excavation of prehistoric and historic field archaeological sites and work with actual artifacts and other materials from those sites. Check the anthropology lab or semester listings of the timing and location of archaeological field schools. (1 lecture hour, 4 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2245***Laboratory Methods in Archaeology***

3 Credit Hours

Introduces the techniques and theory of archaeological lab analysis through the examination of materials from various sites in both the United States and other regions of the world. Individual projects may center around particular interests. (1 lecture hour, 4 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2400***Introduction to Forensic Anthropology***

3 Credit Hours

Introduces students to the identification of the bones of the human skeleton and techniques used to recover and treat forensic material. Topics include use of skeletal remains to identify age at death, biological sex, ancestry and stature; identification of traumatic, pathological and occupational markers on the skeleton; and determination of time since death and post-mortem damage. Includes discussion of ethics involved in forensic anthropology. (2 lecture hours, 2 lab hours)

Prerequisite: ANTHR 1000, ANTHR 1400, CRIMJ 1142, or CRIMJ 2230 with a grade of C or better, or equivalent, or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2420***Bioarchaeology***

3 Credit Hours

Students will be introduced to the scientific study of human skeletal remains from archaeological sites. Major topics of bioarchaeology include the estimation of sex and age at death; non-specific indicators of stress, pathology and trauma; evidence of habitual activity; diet and paleodemography. Students will also begin to integrate the data collected from skeletal remains with archaeological context to address questions of past human behavior. This course is available to students currently accepted to the Czech American Archaeological and Bioarchaeological Field School. (2 lecture hours, 2 lab hours)

Prerequisite: Consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) (1 to 6 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2820***Advanced Selected Topics I***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ANTHR 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ANTHR 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ANTHR 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Applied Technology (APTEC)

APTEC 1001

Survey of Technical Education

3 Credit Hours

Students will get an introduction to skills in Technical Education. The class will allow students to get a practical overview of the technical skills, careers, and technical education available at the College of DuPage. Welding, Heating Ventilation Air Conditioning & Refrigeration (HVACR), Manufacturing, and Electronics/Electro-mechanical will be introduced. (2 lecture hours, 2 lab hours)

APTEC 1100

Project Hire Ed Seminar

1 Credit Hour

Students will be introduced to modern workforce skill sets. They will have an opportunity to interact with employers that are seeking candidates interested in these high-demand skills sets. This course may be repeated up to three times. (1 lecture hour)

APTEC 1820

Selected Topics

1-6 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (0 to 6 lecture hours, 0 to 12 lab hours)

Arabic (ARABI)

ARABI 1100

Arabic Civilization & Culture

3 Credit Hours

Introduction to Arabic culture and civilization as reflected in geography, history, economics, political institutions, literature, music, art, architecture, customs, and social institutions. Class conducted in English. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ARABI 1101

Elementary Arabic I

4 Credit Hours

Develops the ability to speak, understand, read, and write Arabic in a cultural context. For beginning students with no prior experience in the language. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ARABI 1102

Elementary Arabic II

4 Credit Hours

Continues the development of the ability to speak, understand, read, and write Arabic in a cultural context. For students who have successfully completed Arabic 1101 or equivalent or one year of high school Arabic. (4 lecture hours)

Prerequisite: ARABI 1101 or one year of high school Arabic or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ARABI 2201

Intermediate Arabic I

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write Arabic in a cultural context. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. Recommended for students who have successfully completed ARABI 1102 or equivalent or two years of high school Arabic or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ARABI 2202

Intermediate Arabic II

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write Arabic in a cultural context. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. Recommended for students who have successfully completed ARABI 2201 or equivalent or three years of high school Arabic. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Architecture (ARCH)

ARCH 1100

Introduction to Architecture

3 Credit Hours

Introductory study of the theory, history, and principles, and of architecture. Basic principles of architectural analysis, criticism, and aesthetic principles. Includes the relationship of architecture to the cultures that create it specifically in terms of the societies' economic, political and social organization, technological abilities, and spiritual values. Also discusses ethical responsibilities of design professionals especially as environmental stewards. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ARCH 1101

Basic Architectural Drafting

3 Credit Hours

Fundamentals of hand drafting and architectural conventions. Includes use of tools, lettering, dimensioning, drafting techniques, and frame construction vocabulary and technology. (2 lecture hours, 2 lab hours)

ARCH 1111***Building Materials***

4 Credit Hours

Characteristics, properties, and applicable standards of construction materials. Includes all major structural, enclosure and finish materials and standards for materials. Emphasis on the process of material selection and evaluation including sustainability concepts and criteria. (4 lecture hours)

Prerequisite: ARCH 1101 with a grade of C or better, or equivalent or ARCH 1121 with a grade of C or better, or equivalent or ARCH 1130 with a grade of C or better, or equivalent or consent of instructor.

ARCH 1121***Architectural Design Communication***

4 Credit Hours

Introduction to 2-D and 3-D communication and presentation techniques as used in architecture. Includes orthographic, paraline, perspective and freehand drawing techniques and procedures. Covers basic model building and the use of drawing as a problem abstraction and diagramming technique. (1 lecture hour, 6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ARCH 1130***Blueprint Reading***

2 Credit Hours

A survey of graphic construction drawings including paper and electronic mediums. Students learn to interpret construction drawings for residential, commercial and industrial structures. Includes architectural and engineering documents and graphic conventions. (1 lecture hour, 2 lab hours)

ARCH 1131***Introduction to Architectural Design***

4 Credit Hours

Basic design theories and strategies related to the development of spatial concepts in architectural design, including composition, color, form, relationship of elements, and development of 2-D and 3-D design projects. Emphasis on concept generation and evaluation. (2 lecture, 4 lab hours)

Prerequisite: ARCH 1100 and ARCH 1121, both with a grade of C or better, or equivalent or consent of instructor.

ARCH 1141***Construction Methods I***

2 Credit Hours

Survey of basic construction techniques and procedures through project applications. Topics include concrete, masonry, wood frame and lightweight steel construction methods and materials. Includes tool selection and use. Course is not designed to give students trade skills in these areas. (1 lecture hour, 2 lab hours)

ARCH 1211***Basic Computer-Aided Drafting-AutoCAD***

3 Credit Hours

Fundamentals of Computer-Aided Drafting and Design (CADD). Introduces concepts, techniques and procedures necessary to facilitate a basic functional understanding of AutoCAD. (1 lecture hour, 4 lab hours)

Prerequisite: Basic technical drafting course, drafting experience or consent of instructor.

ARCH 1240***Construction Safety Fundamentals***

2 Credit Hours

Exploration of appropriate techniques and strategic planning for safety in the construction process. Focus is on the responsibilities of managers and supervisors for ensuring construction site safety. Worker safety is addressed through the introduction and application of Occupational Health and Safety Administration (OSHA) construction safety and health standards. (2 lecture hours)

ARCH 1301***Introduction to Construction Management***

3 Credit Hours

Construction management as a project delivery system emphasizing the roles and responsibilities of construction managers, contractors, sub-contractors, owners and design professionals, and how they relate to each other. Fundamentals of project administration from pre-construction planning to project close-out through the study and review of case studies. Includes an overview of cost estimating, meetings, project safety and scheduling. (3 lecture hours)

ARCH 1411***Introduction to BIM-Revit***

3 Credit Hours

Fundamentals of Building Information Modeling (BIM) as a construction documentation system. Introduces concepts and features of BIM. Includes software structure and features, modeling and editing techniques, and sheet creation and organization. Recommended: ARCH 1101 and ARCH 1211 or architectural drafting class or experience or consent of instructor. (1 lecture hour, 4 lab hours)

ARCH 1412***Advanced BIM-Revit***

3 Credit Hours

Advanced concepts of Building Information Modeling (BIM). Focuses on applying BIM software to develop a set of construction documents. Simulates project development and documentation. (1 lecture, 4 lab hours)

Prerequisite: ARCH 1411 with a grade of C or better, or equivalent or consent of instructor.

ARCH 1820***Selected Topics in Architecture I***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

ARCH 1821***Selected Topics in Architecture II***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

ARCH 1827***Selected Topics in Architecture***

1 Credit Hour

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour)

ARCH 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours, 2 to 8 lab hours)

Prerequisite: Consent of instructor is required.

ARCH 2102***Detailing and Construction Documents***

4 Credit Hours

Study of commercial construction systems and techniques. Project based class which simulates the process of a project's development in an architectural office. Includes analysis and applications of codes, regulations, and standards, material review and selection, construction detailing and documentation, and office standards and procedures for computer aided drafting and design (CADD) application. (2 lecture hours, 4 lab hours)

Prerequisite: ARCH 1101, ARCH 1111, and ARCH 1211, all with a grade of C or better, or equivalent or consent of instructor.

ARCH 2142***Construction Methods II***

2 Credit Hours

Survey of basic construction techniques and procedures through project applications. Topics include insulation, roofing, siding, installation of doors and windows, drywall, flooring and mechanical and electrical systems. Includes tool selection and use. Course is not designed to give students trade skills in these areas. (1 lecture hour, 2 lab hours)

ARCH 2150***Basic Surveying***

2 Credit Hours

Basic procedures, calculations and field data recording techniques used in surveying. Correct procedures for the use of surveyor's tape, engineer's level, and transit and rod to establish locations and elevations. This is not an appropriate course for someone seeking to become a licensed surveyor. (1 lecture hour, 2 lab hours)

ARCH 2201***Architectural Design I***

5 Credit Hours

Exploration of form and space of the built environment. Includes process of problem analysis and evaluation to generate concepts and develop solutions. (2 lecture hours, 6 lab hours)

Prerequisite: ARCH 1131 with grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

ARCH 2202***Architectural Design II***

5 Credit Hours

Continuation of Architectural Design I. Problems involve larger scale, broader scope, and increased complexity. Advanced and digital presentation techniques will be used for presentations. (2 lecture, 6 lab hours)

Prerequisite: ARCH 2201 with a grade of C or better, or equivalent or consent of instructor.

ARCH 2203***Introduction to Architectural Theory***

3 Credit Hours

Traces the history of architecture and architectural theory from the Renaissance to the contemporary period through built projects, theoretical designs, and original writings of architects and others. (3 lecture hours)

Prerequisite: ARCH 1100 with a grade of D or better, or equivalent and ENGLI 1101 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

ARCH 2210***Mechanical, Electrical, & Plumb Systems***

3 Credit Hours

An overview of mechanical, electrical and plumbing systems for buildings as used by architects and construction managers. Introduction to systems, equipment, design calculations, and drawings, standards, and conventions. (1 lecture hour, 4 lab hours)

Prerequisite: ARCH 1111 with a grade of C or better, or equivalent or consent of instructor.

ARCH 2220***Architectural Computer Modeling***

2 Credit Hours

Computer graphics course using Computer-Aided Drafting (CAD) and other software to create computer architectural models and presentations. (1 lecture hour, 3 lab hours)

Prerequisite: ARCH 1211 with a grade of C or better, or equivalent or consent of instructor.

ARCH 2230***Structural Systems***

3 Credit Hours

An overview of components and concepts of structural systems in steel, concrete, and wood as used by architects. Includes basic structural calculations and analysis of loads and forces. (3 lecture hours)

Prerequisite: ARCH 1111 with a grade of C or better, or equivalent or consent of instructor.

ARCH 2240***Codes, Specifications and Contracts***

3 Credit Hours

Introduction to the legal framework of construction. The scope and implications of codes, includes model codes and review of structure and organization of the International Building Code (IBC), the organization, structure, and role of specifications within construction documents, standard forms of contracts and contractual relationships. (3 lecture hours)

Prerequisite: ARCH 1111 or equivalent or consent of instructor. Course requires Reading Placement Category One.

ARCH 2250***Architectural Presentation and Portfolio***

3 Credit Hours

Advanced architectural presentation techniques. Covers both hardcopy and digital product formats. Uses various 3-D modeling, digital presentation, digital publication and image enhancement software. (1 lecture hour, 4 lab hours)

Prerequisite: ARCH 2201 with a grade of C or better, or equivalent or concurrent enrollment in ARCH 2201, and ARCH 1211 with a grade of C or better, or equivalent or consent of instructor.

ARCH 2260***Construction Estimating***

3 Credit Hours

Basic procedures, calculations, and techniques used in construction cost estimating. Includes bidding procedures, different types of construction estimates and the appropriate procedures for each, and the process of quantity take-offs and cost calculations including equipment, overhead, and profit components. Computer applications to produce estimates and review of existing software titles. (3 lecture hours)

Prerequisite: ARCH 1111 or equivalent or consent of instructor.

ARCH 2270***Construction Scheduling***

3 Credit Hours

Construction scheduling as a tool for project delivery and documentation, from project conception to building occupancy. Emphasizing the interrelationship of the trades and sequencing of the work during the construction process. Includes schedule composition and schedule implementation for project success. (3 lecture hours)

Prerequisite: ARCH 1130 and ARCH 1301, or concurrent enrollment in ARCH 1130 and ARCH 1301, or consent of instructor.

ARCH 2301***Arch Design Competition***

3 Credit Hours

Students will evaluate, select, and participate in an architectural design competition. (3 lecture hours)

Prerequisite: ARCH 2202 with a grade of C or better, or equivalent or consent of instructor.

ARCH 2302***Architectural Design Build***

3 Credit Hours

Exploration of design and construction through the creation of a temporary architectural structure. Includes process of problem analysis and evaluation to generate concepts, develop solutions, and then build an architectural object. Some Saturday build days will be required. (1 lecture hour, 4 lab hours)

Prerequisite: ARCH 1311 with grade of C or better, or equivalent or consent of instructor.

ARCH 2413***BIM Management-Revit***

3 Credit Hours

Introduction to Building Information Modeling (BIM) applications for the construction industry. Recommended course: ARCH 2260 or concurrent enrollment in ARCH 2260. (2 lecture hours, 2 lab hours)

Prerequisite: ARCH 1130 with a grade of C or better, or equivalent and ARCH 1301 with a grade of C or better, or equivalent or consent of instructor.

ARCH 2820***Advanced Selected Topics Architecture I***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

ARCH 2823***Advanced Selected Topics Architecture IV***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (6 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

ARCH 2840***Experimental/Pilot Class***

1-6 Credit Hours

Exploration and analysis of topics within the discipline. This course is used to pilot a proposal for a permanent discipline course. This course may be taken four times for credit as long as different topics are selected. (1 to 6 lecture hours, 1 to 12 lab hours)

Prerequisite: Consent of instructor is required.

ARCH 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ARCH 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Art (ART)

ART 1100 (F2 900)

Introduction to Visual Art and Culture

3 Credit Hours

Exploration of visual forms, methodologies, and processes for making and understanding art within cultural and historical contexts. Designed to encourage visual literacy and develop analytical skills of the non-art major. Field trip may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ART 1101

Drawing I

3 Credit Hours

Introductory studio course with emphasis on accurate observation and representation, informed use of drawing materials, and awareness of two-dimensional art elements and principles. Includes vocabulary development, as well as reference to contemporary and historical models of drawing. (6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1102

Drawing II

3 Credit Hours

Continued exploration of the nature, scope, and principles of drawing. Builds on and refines the experiences of observational drawing in Drawing I focusing on a variety of traditional and non-traditional media. Explores concepts of abstraction, fabricated image making, and color theory. Includes references to contemporary and historical models of drawing. Completion of ART 1151 is recommended prior to enrollment. (6 lab hours)

Prerequisite: ART 1101 with grade of C or better, or equivalent.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1105

Introduction to Studio Art

3 Credit Hours

Introduction to art methods and materials. Includes two-dimensional and three-dimensional design concepts introduced through a variety of media. May include painting, drawing, ceramics, sculpture, computer art, jewelry, and printmaking. Field trip may be required. Course is intended for non-art majors. No previous art background is required. (6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1140

Introduction to Ceramics

3 Credit Hours

Introduction to studio techniques in ceramics including hand-building, wheel throwing, surface treatment, and firing. Presents a history of ceramic arts, past and present, that emphasizes the discipline's global context and role in human culture. Creativity, idea generation, craftsmanship, healthy work habits, and studio safety are emphasized. (6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1151 (ART 907)

Two-Dimensional Foundations Studio

3 Credit Hours

Studio course exploring the formal and conceptual foundations of two-dimensional art and design. Students will develop an understanding of the elements and principles of visual language through experimental use of a variety of tactile and digital media. Emphasis will be placed on individual conceptual development through research, observation, and interpretation of historical and contemporary models of making and thinking. (6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1152

Three-Dimensional Foundations Studio

3 Credit Hours

An introduction to the design and construction of three-dimensional objects and environments. Students will develop an understanding of the elements and principles of three-dimensional art and design through experimental use of sculptural processes, tools and materials. Emphasis will be placed on the relationship of form to function, materials to concept, and transformations of architectural space. (6 lab hours)

Prerequisite: ART 1101 with a grade of C or better, or equivalent or concurrent enrollment in ART 1101 or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1199

Introduction to Print Media I

3 Credit Hours

An introduction to traditional and contemporary printmaking techniques and the history of print media. (6 lab hours)

Prerequisite: Concurrent enrollment in ART 1101 or ART 1101 with a grade of C or better, or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1250

Introduction to Jewelry/Metalsmithing

3 Credit Hours

An introduction to jewelry and metalsmithing processes, materials, tools, and equipment. Fabrication techniques such as piercing, texturing, cold connecting, soldering, and finishing sheet metal are introduced. Craftsmanship, creativity, healthy work habits, and studio safety are emphasized. (6 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1251***Metal Casting/3D Printing***

3 Credit Hours

Introductory exploration and analysis of casting metal for fine art making and jewelry design. (6 lab hours)

ART 1800***Special Project***

1-4 Credit Hours

Special project courses in Art cover topics not otherwise covered by general education courses and other courses in the catalog for the Art discipline. These courses require direct experience and focused reflection in an in-depth study of a specific Art topic and/or the critical analysis of contemporary issues in Art. They are targeted to self-selected students with an interest in the subject matter and involve active participation.

The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of Art concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit as long as different topics are chosen. (1 to 4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1823***Selected Topics in Art***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours, 2 to 6 lab hours)

Prerequisite: Will vary with topic.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (2 to 8 lab hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2151***Color Theory***

3 Credit Hours

Survey of principles, theories, and applications of color aesthetics including major historical and contemporary color systems, the elements of design as they apply to color, and the perceptual effects of color as a medium of art and design. May require a field trip and site specific project. (6 lab hours)

Prerequisite: ART 1151 with a grade of C or better, or equivalent or concurrent enrollment in ART 1151, and ART 1101 with a grade of C or better, or equivalent or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2201***Life Drawing I***

3 Credit Hours

Introduction to drawing the figure from observation. Emphasizes accurate portrayal of the undraped figure. Various drawing materials will be used to investigate anatomical study and pictorial composition. (6 lab hours)

Prerequisite: ART 1101 with a grade of C or better, or equivalent or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2202***Life Drawing II***

3 Credit Hours

Continued exploration of life drawing concepts, materials, and processes concentrating on the undraped figure. Emphasis will be placed upon accurate anatomical proportions and portrayal of sculptural solidity. Individual expression and use of visual metaphors will be developed. (6 lab hours)

Prerequisite: ART 2201 or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2211 (F2 901)***Art Histories Before 1400 CE***

3 Credit Hours

A global, thematic survey of visual images, objects, spaces, and theories produced before 1400 CE. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ART 2212 (F2 902)***Art Histories 1400 to 1950***

3 Credit Hours

A global, thematic survey of visual images, objects, spaces, and theories produced between 1400 and 1950 CE. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ART 2213 (F2 902)***Art Histories Since 1950***

3 Credit Hours

A global, thematic survey of visual images, objects, spaces, and theories produced after 1950 CE. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ART 2214 (F2 903N)***Non-Western Art***

3 Credit Hours

Survey of the aesthetic traditions of selected non-Western societies, including those of Africa, Asia, Oceania, and the Native Americas. Examines major works of painting, sculpture, architecture, and the decorative arts within their historical, cultural, and social contexts. Field trip may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ART 2215***History of Adornment***

3 Credit Hours

A survey of the history of jewelry and metals in a social and cultural context. This course introduces students to representative examples of historical world jewelry and metals. Using a combination of lectures, slides, videos, readings, and group discussions, the course explores the roles of personal adornment, jewelry, and metals in terms of major historical periods, worldwide cultures, important events, and famous personages. Attention will be paid to contemporary work and international art jewelry, including design, and fabrication issues. Class discussions will focus on the function of jewelry and its presentation and display on the body. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2216***Introduction to Philosophy of Art***

3 Credit Hours

Philosophical theories of the creative process in art. The course offers the study and analysis of ideas and concepts about art as a basis for critical assessment of artistic pursuits. Credit cannot be given for both ART 2216 and PHILO 2250. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2217***Art and Nature***

3 Credit Hours

A survey of visual art, theories, materials, institutions, worldviews, and practices that explore our complicated relationships to the natural world, including climate, landscape, plants, and animals. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

ART 2218***Seeing Animals***

3 Credit Hours

With an emphasis on critical theory and visual studies methods, this course will consider how images of nonhuman animals in the visual arts, film, and literature reflect or challenge widely-held cultural attitudes towards animals, and our relationships with them. Field trips may be required. (3 lecture hours)

Prerequisite: Course requires reading placement category one or consent of instructor.

ART 2221***Painting I***

3 Credit Hours

Introduction to painting methods using various materials such as acrylic, watercolor, and oil paint. Emphasis in paintings will be on technical skill sets, originality of content, and an understanding of art history as contextual and referential. (6 lab hours)

Prerequisite: ART 1101 with a grade of C or better, or college equivalent or concurrent enrollment in ART 1101.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2222***Painting II***

3 Credit Hours

Further exploration of painting skills with continued development of individual expression. Formal and conceptual rigor is emphasized. (6 lab hours)

Prerequisite: ART 2221 with a grade of C or better, or college equivalent.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2231***Sculpture I***

3 Credit Hours

Introduction to basic sculptural materials, tools, equipment, processes, and concepts. Basic three dimensional design principles will be addressed. An informed context will be provided by the study of the work of current and historic sculptors. (6 lab hours)

Prerequisite: ART 1152 with a grade of C or better, or equivalent.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2232***Sculpture II***

3 Credit Hours

Continued exploration of sculptural materials, tools, equipment, processes, and concepts. Installation and site-specific sculpture will be investigated, and context will be provided through the study of contemporary and historical sculpture. (6 lab hours)

Prerequisite: ART 2231 with a grade of C or better or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2241***Wheel Throwing Ceramics***

3 Credit Hours

Studio course focused on creating functional art using the potter's wheel. Presents the principles of functional design as related to ceramics, which are applied to the development of an individual portfolio of functional ceramics. (6 lab hours)

Prerequisite: ART 1140 with a grade of C or better, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2242***Glaze Chemistry***

3 Credit Hours

Course explores the art and science of ceramic glazes, covering composition, formulation, and application techniques. Students will learn about the properties of various materials, the firing process, and how to achieve desired finishes. (2 lecture hours, 2 lab hours)

Prerequisite: ART 1140 with a grade of C or better, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2244***Ceramics Wood, Raku, & Pit Firings***

1 Credit Hour

Theory and practical application of outdoor firings, including wood, raku, and pit. Exploration of functional and sculptural forms appropriate for alternative firings, utilizing pottery wheel and/or handbuilding processes. Includes clay bodies, surface treatment, special effects, and firing protocol. (2 lab hours)

Prerequisite: ART 1140 with a grade of C or better, or equivalent or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2249***Advanced Ceramics Studio***

3 Credit Hours

Independent exploration of ceramics topics. Each student will work with the professor to develop an individual course plan to build skills. Students will develop a portfolio of independent work and personal direction in ceramics. (6 lab hours)

Prerequisite: Completion of ART 1140, 2241, and 2242 with grades of C or better, or consent of instructor

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2250***Independent Painting Studio and Painting Portfolio***

3 Credit Hours

Setting up, maintaining, and working in an independent painting studio. Emphasis will be on exploration of, and proficiency with materials, context, and concept. An evolving understanding of art history, the tradition of painting, and contemporary directions in painting will underscore the course. Digital documentation of work will be required. (6 lab hours)

Prerequisite: ART 2221 with a grade of C or better or equivalent or consent of instructor.

ART 2251***Intermediate Jewelry/Metalsmithing: Casting***

3 Credit Hours

An intermediate exploration of jewelry/metalsmithing with a focus on wax carving and working methods, lost wax casting, production of multiples, and an introduction to 3D modeling and printing. Emphasis is placed on technical skills, craftsmanship, and integration of form with concept. Students will further develop their personal aesthetic through the medium of metal. (6 lab hours)

Prerequisite: ART 1250 with a grade of C or better or equivalent or consent of instructor

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2252***Intermediate Jewelry/Metalsmithing: Forming & Fabrication***

3 Credit Hours

An intermediate exploration of jewelry/metalsmithing with a focus on sheet metal forming and fabrication processes. Techniques demonstrated include die-forming, chasing and repoussé, and hammer forming. Emphasis is placed on technical skills, craftsmanship, and integration of form with concept. Students will further develop their personal aesthetic through the medium of metal. (6 lab hours)

Prerequisite: ART 1250 with a grade of C or better or equivalent or consent of instructor

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2253***Intermediate Jewelry/Metalsmithing: Enameling***

3 Credit Hours

An intermediate exploration of jewelry/metalsmithing with a focus on vitreous enameling, a process of fusing powdered glass to metal at high temperatures. Techniques include sifting, champlevé, basse-taille, and cloisonné. Emphasis is placed on technical skills, craftsmanship, and integration of form with concept. Students will further develop their personal aesthetic through the application of color on metal. (6 lab hours)

Prerequisite: ART 1250 with a grade of C or better or equivalent or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2259***Advanced Jewelry/Metalsmithing Studio***

3 Credit Hours

Independent exploration of jewelry/metalsmithing topics. Each student will work with the professor to develop an individual course plan to further refine their skills and designs. (6 lab hours)

Prerequisite: ART 1250 and one or more of the following: ART 2251, ART 2252, ART 2253 with a grade of C or better or equivalent or consent of instructor.

ART 2266***Digital Art I***

3 Credit Hours

Introduction to the technology, language, and approaches to digital media. An exploration of digital imaging through skill-building exercises in two-dimensional software and hardware, conceptual development, and historical and contemporary research. Note: This is not a graphic design course. (6 lab hours)

Prerequisite: ART 1101 with a grade of C or better or concurrent enrollment in ART 1101, or ART 1151 with a grade of C or better or concurrent enrollment in ART 1151.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2267***Digital Fabrication Studio***

3 Credit Hours

Exploration of the technology, language, and approaches to digital media through the introduction of three-dimensional hardware and techniques such as 3D printing, CNC routing, laser engraving, responsive programming, installation, and sculptural art forms. (6 lab hours)

Prerequisite: ART 1151 with a grade of C or better, or equivalent, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2275***Intaglio Printmaking***

3 Credit Hours

An introduction to the intaglio printmaking processes. Topics include etching, engraving, drypoint, aquatinting, and photo-etching in creating editions of fine art prints. Emphasis is placed upon mastery and the creative use of these printmaking techniques. (6 lab hours)

Prerequisite: ART 1101 with a grade of C or better, or equivalent.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2276***Lithography***

3 Credit Hours

An introduction to the lithographic printmaking process. Topics include the use of crayon, tusche, photocopy and drawing transfers, and multiple plate printing in creating editions of lithographic prints from both metal plate and stone. Emphasis is placed upon mastery and the creative use of these printmaking techniques. (6 lab hours)

Prerequisite: ART 1101 with a grade of C or better, or equivalent.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2277***Screen Printing***

3 Credit Hours

An introduction to screen printing processes. Topics include hand-cut, hand-drawn, and photographic stencils. Studio work in color registration for printing on paper and fabric to create editions of fine art prints. Emphasis is placed upon the creative use of these printmaking techniques. (6 lab hours)

Prerequisite: ART 1101 or ART 1199 with a grade of C or better, or consent of instructor.

ART 2278***Relief Printmaking***

3 Credit Hours

An introduction to relief printing processes. Topics include the use of both linocut and woodcut blocks; single block, multi-block, and reduction block methods; and printing by hand and press in creating editions of fine art prints. Emphasis is placed upon the creative use of these printmaking techniques. (6 lab hours)

Prerequisite: ART 1101 or ART 1199 with a grade of C or better, or consent of instructor.

ART 2281***Time Based Media I***

3 Credit Hours

An introduction to the concepts and approaches to Time-Based Media. Students will develop a broader vocabulary in this area through creation of work in experimental sound editing, video, projection, performance, and installation. Emphasis will be placed on individual conceptual development and art as response to the world around us through interdisciplinary explorations of contemporary issues. (6 lab hours)

Prerequisite: ART 1151 with a grade of C or better, or equivalent, or concurrent enrollment in ART 1151, or PHOTO 1101 with a grade of C or better, or equivalent, or concurrent enrollment in PHOTO 1101, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2282***Time Based Media II***

3 Credit Hours

An intermediate expansion of the concepts and approaches to time-based media in a collaborative environment. Creation of time-based work may include web-based and social media platforms, collaborative installation work, public work and interventions, interdisciplinary partnerships, and long-term social practice projects. (6 lab hours)

Prerequisite: ART 2281 with a grade of C or better, or equivalent, or PHOTO 2281 with a grade of C or better, or equivalent, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2283***Time Based Media III***

1-3 Credit Hours

Advanced development of time based media portfolio and experiences through personal goal setting in technical skills, mentorship, and further study based on previous work in Time Based Media I and II. (2-6 lab hours)

Prerequisite: ART 2282 or PHOTO 2282 with a grade of C or better, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2301***Art Experiences***

1-3 Credit Hours

Through the discovery of histories, cultures, and values found within the artwork and institutions of various locations, students will learn to navigate the art and institutions of the area, examine them critically, and create connections with other fields of study. This is a field studies course. (1-3 lecture hours)

ART 2800***Special Project***

1-4 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). (2 to 8 lab hours)

Prerequisite: At least one course in the discipline or consent of the instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2820***Advanced Selected Topics I***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ART 2900***Portfolio Development and Professional Practices for Artists***

3 Credit Hours

Exploration of the skills and practices necessary to build and sustain a professional art career. Utilizing an individual artist plan as a guiding framework, the course combines writing and portfolio development with critical exploration around creative practice and community building. Designed for advanced art students pursuing an AFA degree, transferring to a BFA program, preparing for an MFA, or advancing their career. May include field trips to galleries and professional art studios. (6 lab hours)

Prerequisite: ART 1101, ART 1151, and ART 1152, all with a grade of C or better; or consent of instructor.

Automotive Service Technology (AUTO)

AUTO 1040***Automotive for Non-Majors***

3 Credit Hours

Overview of personal auto maintenance principles. Topics include proper maintenance for longevity, resale value, and safety; how vehicle systems work; and how to complete some light vehicle repairs. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

AUTO 1100***Intro to Automotive Service Technology***

1 Credit Hour

An introductory course in the fundamental knowledge and skills that an automotive student will need for the automotive program. Students will learn shop safety, use of service information, automotive lifts, use of hand tools, identification of fasteners, and automotive measurement techniques. (1 lecture hour, .5 lab hours)

AUTO 1110***Engine Design and Operation***

3 Credit Hours

Design, operation and troubleshooting procedures of the gasoline engine. Includes disassembly, identification and inspection of parts, use of service manuals, safety, and shop procedures. (1 lecture hour, 4 lab hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

AUTO 1120***Manual Drive Train and Axles***

3 Credit Hours

The course covers automotive manual drive trains, clutch hydraulics, axle systems, diagnostics and inspection. (1 lecture hour, 4 lab hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

AUTO 1131***Automotive Electrical I***

3 Credit Hours

Automotive circuit construction emphasizing meter usage. Analog and digital meters and oscilloscopes are stressed. Practical approach to reading wiring diagrams, service manuals, and manufacturers' repair procedures, including diagnosis of selected vehicle accessory circuits. (1 lecture hour, 4 lab hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

AUTO 1140***Suspension, Steering and Alignment***

3 Credit Hours

Automotive suspension systems for front-wheel drive and rear-wheel drive vehicles. Steering systems, including rack and pinion, are diagnosed and repaired. Wheels and tires and their effect on handling and ride. Wheel alignment angles are measured and adjusted. (1 lecture hour, 4 lab hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

AUTO 1150***Power Equipment Electrical Systems***

3 Credit Hours

Basic electrical theory, circuit construction, and digital multimeter use. Service information and wiring diagrams used in power equipment diagnosis. Power equipment starting and charging systems. Small engine ignition systems. Electrical wiring repair techniques. Diagnosis of power equipment electrical systems. Credit cannot be earned for both AUTO 1150 and HORT 1150. (2 lecture hours, 2 lab hours)

AUTO 1151***2-Cycle Small Engine Repair/Maintenance***

2 Credit Hours

Introduces principles of 2-cycle engine-powered devices used in the landscape industry. Topics Include 2-cycle engine function, use of technical literature, disassembly, repair, and troubleshooting techniques. Credit cannot be earned for both AUTO 1151 and HORT 1151. (1 lecture hour, 2 lab hours)

AUTO 1152***4-Cycle Small Engine Repair/Maintenance***

3 Credit Hours

Introduces principles of 4-cycle small engine repair and maintenance. Includes troubleshooting, failure analysis and problem solving skills to repair and rebuild small engines used in landscape, industrial, and agricultural applications. Credit cannot be earned for both AUTO 1152 and HORT 1152. (2 lecture hours, 2 lab hours)

AUTO 1232***Automotive Electrical II***

3 Credit Hours

Starting, charging, and lighting systems are covered with an introduction to vehicle immobilizer, motor accessories, vehicle network and Automated Driver Assist Systems (ADAS). (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1131 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 1240***Braking Systems***

3 Credit Hours

Automotive braking systems including rotor and drum machining, caliper and wheel cylinder rebuilding, wheel-bearing service, brake pad and shoe replacement, and diagnosis and service of anti-lock systems. (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1131 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 1250***Automotive Air Conditioning and Heating***

3 Credit Hours

The servicing of automotive air conditioning and heating systems, including refrigerant recovery and recycling, performance testing, and system diagnosis and repair. (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1131 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 1261***Engine Controls & Emissions I***

3 Credit Hours

Engine computer controls including theory, inspection, testing, and diagnosis of sensors, outputs, emission controls, fuel, and ignition systems. (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1110 and AUTO 1131, both with a grade of C or better, or equivalent, or consent of instructor. Course requires Reading Placement Category One.

AUTO 1301***Automotive Service Consulting***

3 Credit Hours

Fundamentals of automotive customer service, sales skills, and writing effective repair orders will be covered. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One or consent of instructor.

AUTO 1302***Automotive Service Management***

3 Credit Hours

Principles of service management and repair shop ownership will be covered. Shop operations, facilities, marketing, and employee management will be explored. (3 lecture hours)

Prerequisite: AUTO 1301 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 1820***Selected Topics***

1-6 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (1 to 6 lecture hours, 2 to 12 lab hours)

AUTO 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.

AUTO 2120***Automatic Transmission***

3 Credit Hours

This course covers the theory of operation, diagnosis, and repair of automatic transmissions and transaxles. Course includes inspection and rebuilding of transmission apply devices, planetary gear sets, oil pumps, valve bodies, and one-way clutches. (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1120 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 2133***Automotive Electrical III***

3 Credit Hours

Course covers theory of operation and diagnosis of standard body electrical systems. Topics include vehicle networks, power windows, wipers, door locks, seats, lighting, instrumentation, cruise control, Automated Driver Assistance Systems (ADAS), and supplemental restraints. Emphasis is placed on analysis of electrical diagrams and development and practice of diagnostic techniques. (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1232 with a grade of C or better, or equivalent, or consent of instructor. Course requires Reading Placement Category One. Recommended: AUTO 1261 with a grade of C or better, or equivalent.

AUTO 2140***Advanced Chassis Systems***

3 Credit Hours

Advanced operation, diagnosis and testing of suspension and chassis systems. Topics include TPMS, electronic power steering and suspension systems, and NVH diagnostics. (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1120, AUTO 1131, AUTO 1140, and AUTO 1240, all with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 2162***Engine Controls and Emissions II***

3 Credit Hours

Advanced computerized engine control systems common to domestic and import vehicles. Testing of systems, sensors, components, circuits, scan-tool use, fuel injection, and On Board Diagnostics (OBD) II. (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1131, AUTO 1232, and AUTO 1261, all with a grade of C or better or equivalent, or consent of instructor. Course requires Reading Placement Category One.

AUTO 2220***Advanced Automotive Drivetrains***

3 Credit Hours

Inspection, construction, operation, and diagnosis of automatic and manual transmission, transaxle, transfer case, and driveline electrical components and controls. Includes fundamental theory, operation, construction, inspection, and diagnosis of switches, sensors, solenoids, motors, and control devices. (1 lecture hour, 4 lab hours)

Prerequisite: AUTO 1120, AUTO 1131, and AUTO 2120 with a grade of a C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 2280***Automotive Service***

6 Credit Hours

This course provides hands-on automotive repair shop experience for the advanced automotive student. (1 lecture hour, 10 lab hours)

Prerequisite: AUTO 1140, AUTO 1232, AUTO 1240, AUTO 1250, AUTO 1261, and AUTO 2120 or equivalent, or consent of instructor. Course requires Reading Placement Category One.

AUTO 2345***Automotive Hybrid Technology***

2 Credit Hours

Overview of Hybrid Electric Vehicles (HEV), Plug-in Hybrid Electric Vehicles (PHEV), and Battery Electric Vehicles (BEV) terminology, safety requirements, theory of operation, modification to other automotive systems, and specialized tool requirements. (1 lecture hour, 2 lab hours)

Prerequisite: AUTO 1131 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 2364***Automotive ScanTool Usage & Exploration***

1 Credit Hour

Hands-on practice and experience with multiple manufacturer-specific and generic OBD2 ScanTools. Students will explore the many different functions of original equipment and aftermarket ScanTools for diagnosis and programming capabilities on multiple vehicle systems. (2 lab hours)

Prerequisite: AUTO 1232 or equivalent or AUTO 1261 or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 2365***Intro to Diesel Fuel Systems & Emissions***

2 Credit Hours

A generic course designed to increase the knowledge of diesel engine design, fuel control systems, and emission controls. Topics of discussion include direct and indirect injection, mechanical fuel systems, unit injection systems, electronic diesel control, hydraulically actuated electronic unit injectors (HEUI), common-rail fuel systems and related emission control devices. (1 lecture hour, 2 lab hours)

Prerequisite: AUTO 1110 and AUTO 1261 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

AUTO 2370***A.S.E. Certification Analysis & Tech***

2 Credit Hours

An integrative course teaching a higher level of skills to combine previous courses and introduce updates in technology to prepare for the National Institute for Automotive Service Excellence (ASE) certification exams. (2 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

AUTO 2455***Electric Vehicles (EV) and Equipment***

3 Credit Hours

An overview of Battery Electric Vehicles (BEV), and Range Extender (REx) terminology, safety requirements, theory of operation, modification to other automotive systems, and specialized tool requirements. (2 lecture hours, 2 lab hours)

Prerequisite: AUTO 1232 with a grade of C or better, or equivalent, or consent of instructor. Course requires Reading Placement Category One. Recommended: AUTO 1261 or AUTO 2345 with a grade of C or better, or equivalent.

AUTO 2840***Experimental/Pilot Class***

1-6 Credit Hours

Exploration and analysis of topics within the discipline. This course is used to pilot a proposal for a permanent discipline course. This course may be taken four times for credit as long as different topics are selected. (6 lecture hours, 12 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category One.

AUTO 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

AUTO 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Aviation Technology (AVIAT)

AVIAT 1100***Introduction to Aviation***

1 Credit Hour

Students will be introduced to different careers in the aviation industry which include being a professional pilot, aircraft mechanic, air traffic controller, airport manager, and drone operator. (1 lecture hour)

AVIAT 1105***Aviation Procedures Training***

3 Credit Hours

Introduction to aircraft operations, procedures and basic flying skills in both the classroom and simulator environment. Will introduce the components of an aircraft, pre-flight safety check, cockpit orientation, and basic flight maneuvers under visual and instrument flight conditions, as well as simulator operations. Students will spend time in a simulator, and this time may reduce required time spent on the airport campus and in the aircraft. (2 lecture hours, 2 lab hours)

Prerequisite: Completion of either AVIAT 1110 or AVIAT 1310, or concurrent enrollment in AVIAT 1110 or AVIAT 1310. MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT or SAT math sub-score. Students who plan to transfer are encouraged to discuss math prerequisites with an advisor. Course requires Reading Placement Category One. At least an FAA Third Class Medical Certificate is required for enrollment.

AVIAT 1110***Private Pilot Ground School***

3 Credit Hours

This course teaches private pilot aeronautical knowledge. Topics include those covered in the Federal Aviation Regulations and Airman Certification Standards for private pilots. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT or SAT math sub-score. Students who plan to transfer are encouraged to discuss math prerequisites with an advisor. Course requires Reading Placement Category One. Students must be at least 17 years of age. At least an FAA Third Class Medical is required for enrollment in this course.

AVIAT 1115***Aviation Proficiency Lab***

0.5 Credit Hours

This course will provide the additional flight education necessary for a student to complete the skills needed to pass an FAA check ride by building confidence and proficiency. A student can be concurrently enrolled in Aviation Skills Lab and any other Aviation flight course, with permission from the faculty. Additional fees required for this course. (1 lab hour)

Prerequisite: Student must be enrolled in a flight class through the Aviation Management Flight Track program.

AVIAT 1120***Instrument Ground School***

3 Credit Hours

This course emphasizes instrument rating aeronautical knowledge, including topics covered in the Federal Aviation Regulations and Airman Certification Standards for the instrument rating. Attendance for all FAA flight and ground courses is mandatory. 35 hours of classroom instruction are required as per the FAA, and flight time absences can lead to not completing before the end of the semester. Students must plan on being present for all flight instruction sessions. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent, or a qualifying score on the Mathematics Placement Test, or a qualifying ACT or SAT math sub-score; and AVIAT 1210 with a grade of C or better; or consent of instructor. Students who plan to transfer are encouraged to discuss math prerequisites with an advisor. Course requires Reading Placement Category One. Students must be at least 17 years of age. At least an FAA Third Class Medical is required for enrollment.

AVIAT 1130***Air Traffic Control***

3 Credit Hours

An introduction into the US Air Traffic Control system as it relates to general and professional aviation. Students will learn the role of Air Traffic Control (ATC) in both ground-based, departure and arrival scenarios, as well as practice basic communication and proper ATC phraseology. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT or SAT math sub-score. Students planning to transfer should speak to a program advisor about math requirements. Course requires Reading Placement Category One. Students must be at least 17 years of age.

AVIAT 1140***Aviation Safety Principles***

3 Credit Hours

An introduction into the aviation culture of safety and how it applies to both general and professional aviation. Government agencies and reporting processes, safety-based training courses and initiatives, and human factors such as proficiency training, hazardous attitudes and pilot fatigue will be discussed. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT or SAT math sub-score. Students who plan to transfer are encouraged to discuss math prerequisites with an advisor. Course requires Reading Placement Category One.

AVIAT 1210***Private Pilot Flight Instruction***

3 Credit Hours

Students will conduct flight training in a single-engine land airplane to prepare for the FAA private pilot practical exam. An FAA certified flight instructor will work with the student to teach and perform all required tasks to proficiency. This course is in compliance with 14 CFR part 61 and 14 CFR part 141. Attendance for all FAA flight and ground courses is mandatory. 35 hours of classroom instruction are required as per the FAA, and flight time absences can lead to not completing before the end of the semester. Students must plan on being present for all flight instruction sessions. (6 lab hours)

Prerequisite: Completion of AVIAT 1105 and AVIAT 1110 required. MATH 0465 or MATH 0481 with a grade of C or better, or equivalent; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT or SAT math sub-score. Students who plan to transfer are encouraged to discuss math prerequisites with an advisor. Course requires Reading Placement Category One. Students must be at least 17 years of age. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course. Students must have the FAA Private Pilot Knowledge Test passed prior to day one of class. Verification of US citizenship or completion of TSA Flight Training Security Program prior to enrollment.

AVIAT 1215***Aviation Skills Lab***

1-3 Credit Hours

This course will provide the additional flight education necessary for a student to complete the skills needed to pass an FAA check ride. Students who do not earn their certificate or rating in the preceding semester can enroll in the Aviation Skills Lab to do so. Please note that a skills evaluation and recommendation by the aviation faculty is a prerequisite for enrollment in this course. A student can be concurrently enrolled in Aviation Skills Lab and any other Aviation flight course, with permission from the faculty. Additional fees required for this course. (2 to 6 lab hours)

Prerequisite: Completion of evaluation and recommendation from Aviation Management faculty. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 1220***Instrument Flight Instruction***

3 Credit Hours

Students will conduct flight training in single-engine land airplane to prepare for and take the FAA instrument rating practical exam. An FAA instrument flight instructor will work with the student to teach and perform all tasks to proficiency. This course is in compliance with 14 CFR Part 61 and 14 CFR Part 141. Attendance for all FAA flight and ground courses is mandatory. 35 hours of classroom instruction are required as per the FAA, and flight time absences can lead to not completing before the end of the semester. Students must plan on being present for all flight instruction sessions. (6 lab hours)

Prerequisite: AVIAT 1210 with a grade of C or better, or consent of instructor. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course. Verification of US Citizenship or TSA Flight Training Security Program approval required prior to enrollment.

AVIAT 1300***Aviation Operations***

3 Credit Hours

Summary of the aviation industry and employment opportunities. The course highlights basic aviation history, primary flight theory, aviation weather services, and aviation regulations. The course also explores careers in flight operations, aviation maintenance, air traffic control and management positions. (3 lecture hours)

Prerequisite: AVIAT 1100 with a grade of C or better or consent of instructor.

AVIAT 1310***sUAS Part 107 Ground School***

3 Credit Hours

This course teaches the remote pilot aeronautical knowledge necessary to pass the FAA Knowledge Test. Topics include those covered in the Federal Aviation Regulations and Airman Certification Standards for remote pilots in small unmanned aircraft systems (sUAS). (3 lecture hours)

Prerequisite: MATH 0465, MATH 0481, or college equivalent with a grade of C or better; or a qualifying score on the Mathematics Placement Test; or a qualifying ACT math score. Course requires Reading Placement Category One. Students must be at least 16 years of age.

AVIAT 2110***Commercial Pilot Ground School***

3 Credit Hours

This course covers commercial pilot aeronautical knowledge. Topics include those covered in the Federal Aviation Regulations and Airman Certification Standards for commercial pilots. (3 lecture hours)

Prerequisite: Completion of AVIAT 1120 with a grade of C or better, concurrent enrollment or consent of instructor.

AVIAT 2114***Aviation Meteorology***

2 Credit Hours

An introduction into meteorological phenomena and weather data that is fundamental to aviation. The basics of weather-related flight hazards including thunderstorms, icing, wind shear, and turbulence will be discussed. Students will interpret various text and charted aviation weather products as used commonly by pilots including Aviation Routine Weather Reports (METARs), Terminal Aerodrome Forecasts (TAFs), and graphical information available from the Aviation Weather Center. (2 lecture hours)

Prerequisite: EARTH 1110 and EARTH 1116, both with a grade of C or better, or equivalent or consent of instructor.

AVIAT 2210***Commercial Pilot Flight Instruction I***

3 Credit Hours

Students will conduct flight training in a single-engine land airplane to prepare for the FAA commercial pilot practical exam. Students will fly solo or with a partner in a crew-like environment to perform all required tasks to proficiency. This course is in compliance with 14 CFR part 61, 14 CFR part 91, and 14 CFR part 141. (6 lab hours)

Prerequisite: AVIAT 1210 with a grade of C or better or consent of instructor. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students must be at least 18 years of age. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 2220***Commercial Pilot Flight Instruction II***

1 Credit Hour

Students will continue flight training in a single-engine land airplane to prepare for the FAA commercial pilot practical exam. This course is in compliance with 14 CFR part 61, 14 CFR part 91, and 14 CFR part 141. Attendance for all FAA flight and ground courses is mandatory. 35 hours of classroom instruction are required as per the FAA, and flight time absences can lead to not completing before the end of the semester. Students must plan on being present for all flight instruction sessions. (2 lab hours)

Prerequisite: AVIAT 2210 with a grade of C or better or consent of instructor. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course. The FAA Commercial Pilot Knowledge Test must be passed prior to day one of this course.

AVIAT 2230***Multi-Engine Flight Instruction***

2 Credit Hours

Students will continue their commercial pilot development by learning how to fly multi-engine aircraft. An FAA-certificated flight instructor will teach advanced systems, performance, and weather applicable to multi-engine aircraft. A combination of ground, aircraft, and simulator training are included. This course is in compliance with 14 CFR part 61 and 14 CFR part 141. Attendance for all FAA flight and ground courses is mandatory. 35 hours of classroom instruction are required as per the FAA, and flight time absences can lead to not completing before the end of the semester. Students must plan on being present for all flight instruction sessions. (1 lecture hour, 2 lab hours)

Prerequisite: AVIAT 2220 with a grade of C or better or consent of instructor. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. Students will need to contact the Aviation department for a permit to enroll in this course. US Citizenship or TSA Flight Training Security Program verification must be completed prior to day one of the course.

AVIAT 2250***Flight Instructor, Airplane***

4 Credit Hours

This course is the culmination of students' hard work spent over their aviation training. This course will provide the training and education required to pass the FAA CFI-Airplane oral and flight test, as well as become an effective aviation teacher. This course is in compliance with 14 CFR Parts 61 and 141. Attendance for all FAA flight and ground courses is mandatory. 35 hours of classroom instruction are required as per the FAA, and flight time absences can lead to not completing before the end of the semester. Students must plan on being present for all flight instruction sessions. (3 lecture hours, 2 lab hours)

Prerequisite: Students must be at least 18 years of age. All students are required to have a valid FAA Third Class Medical at enrollment and for the duration of the course. Students utilizing VA Benefits are required to have a valid FAA Second Class Medical issued within the preceding 12 calendar months at enrollment and for the duration of the course. All students must possess an FAA Commercial Pilot Airplane certificate with Instrument and Single-engine ratings, and have the FAA Flight Instructor-Airplane and Fundamentals of Instruction Knowledge Test completed prior to the second week of the course. Students will need to contact the Aviation department for a permit to enroll in this course.

AVIAT 2300***Airport Management***

3 Credit Hours

Students will become familiar with the topic of airport management in the 21st century, which includes managing, governing, and ownership of airports. (3 lecture hours)

Prerequisite: AVIAT 1110 with a grade of C or better or consent of instructor.

AVIAT 2310***Airline Management***

3 Credit Hours

Students will become familiar with airline management, including organizational structure, economics, and operations. (3 lecture hours)

Prerequisite: AVIAT 1110 with a grade of C or better or consent of instructor.

AVIAT 2320***Introduction to Aircraft Dispatch***

3 Credit Hours

Introduction to aircraft dispatch tools, procedures and applications. Students will gain a more advanced understanding of airline and airport operations, including the effect that weather and aircraft loading have on aircraft performance. (3 lecture hours)

Prerequisite: AVIAT 1300 and EARTH 1116, both with a grade of C or better, or consent of instructor.

AVIAT 2400***Advanced Aircraft Systems***

3 Credit Hours

Students will learn about advanced aircraft systems to prepare them for the professional systems courses required by industry jet operators. (3 lecture hours)

Prerequisite: AVIAT 2110 with a grade of C or better, or concurrent enrollment in AVIAT 2110, or consent of instructor.

AVIAT 2500***Aviation Career Preparation***

3 Credit Hours

This course prepares students for entering the aviation industry in a professional capacity. (3 lecture hours)

Prerequisite: AVIAT 1300 with a grade of C or better or consent of instructor.

AVIAT 2865***Aviation Internship***

4 Credit Hours

Course requires participation in Aviation work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 300 clock hours. (20 lab hours)

Prerequisite: Consent of instructor and 3.0 cumulative grade point average.

Biology (BIOL)

BIOL 1100 (L1 900L)***Survey of Biology***

4 Credit Hours

This biology course promotes scientific literacy for non-science majors and interested students. Organisms are studied from their behavioral, ecological, hereditary and evolutionary perspectives. An inquiry-based approach to understanding biological processes is emphasized. Students explore the relevance of biology to contemporary issues in human society. (3 Lecture hours, 2 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a C or better, or a qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Life Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOL 1110 (L1 905L)***Environmental Biology***

4 Credit Hours

An interdisciplinary study of the environment investigating how nature works and how things are interconnected. Based on an understanding of ecological concepts and principles, students examine lifestyle issues and critically analyze the relationship among population, natural resources, land use, agriculture, biodiversity, industrialization and pollution. Environmental problems are examined from scientific, ethical, economic and sociological perspectives to enable students to understand the relevance of biology to contemporary issues in human society. (3 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Life Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 1120 (L1 906)***Introduction to Genetics***

3 Credit Hours

This course provides an introduction to the principles of genetics emphasizing the significance of genetics to human culture, including classical transmission genetics, molecular genetics and biotechnology, and the genetics of populations. (3 lecture hours)

Prerequisite: MATH 0481 (or college equivalent) with a grade of C or better or a qualifying score on the Math Placement Exam. Course requires Reading Placement Category One.

Course types: General Education: Life Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 1130***Fundamentals of Biotechnology***

4 Credit Hours

Application of living organisms and their products in industry, medicine, agriculture, forensics, and environmental science. This multidisciplinary course introduces fundamental principles of biology and chemistry that are used to develop biotechnology and surveys various fields of biotechnology. Topics include biochemistry, recombinant DNA, bioinformatics, medical biotechnology, and bioremediation. Laboratory includes techniques that are routinely used in biotechnology such as chromatography, electrophoresis, and genetic transformation of cells. This course is intended for both science majors and non-science majors. (3 lecture hours, 3 lab hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Life Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 1151 (L1 910L/BIO 910)***Principles of Biological Science***

5 Credit Hours

An introduction to biology for the biological science major and interested students. Topics include the philosophy of science, scientific method, chemical organization of life, cell biology, cellular metabolism, genetics, molecular genetics, molecular biology, evolution, and biodiversity of the Bacteria, Archaea, protists, and Fungi. (4 lecture hours, 3 lab hours)

Prerequisite: MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Life Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 1152 (L1 910L/BIO 910)***Principles of Biological Science***

5 Credit Hours

Continuation of Biology 1151. An introduction to higher levels of biological organization from the organism to the ecosystem. Topics include diversity of the plants and animals, organismal structure and physiology, behavior, population ecology, community ecology, ecosystem ecology, and environmental biology. (4 lecture hours, 3 lab hours)

Prerequisite: BIOL 1151 with a grade of C or better.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 1200***Introduction to Animal Research in the Field***

2-3 Credit Hours

Students will be introduced to field-based animal research through the opportunity to directly observe and model how ecologists study wildlife in their natural habitats. The field component of the course, comprising at least 50% of the course contact time, offers students the opportunity to accompany researchers as they conduct experiments and gather data on various animal species in the natural setting. Through these outdoor, on-site learning experiences, students will be introduced to some of the latest research trends shaping the fields of wildlife biology, animal behavior, conservation biology, ecology, and wildlife management. Field-based research experiences will be enriched through related lectures, seminars, discussions, and group presentations. This course is repeatable up to three times so long as the location of the field study component of the course is different each time. (2 to 3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 1205***Ecoregion Field Study***

1-3 Credit Hours

This course will introduce students to fundamental ecological concepts by travelling to a particular ecoregion. Course content will focus on the region's unique ecology, biodiversity, evolutionary processes, and natural habitats. Immersive, field-based learning experiences will be enriched by lectures, seminars, and group presentations addressing the relevant research trends, management directives, and conservation initiatives shaping the long-term sustainability of the selected ecoregion. This course is repeatable up to three times as long as the ecoregion visited is different in each case. (1 to 3 lecture hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 1210***Topics in Sustainability***

1-3 Credit Hours

This course will introduce students to the theory, principles, and practices of environmental sustainability and build on this foundational understanding while focusing on a particular sustainability issue. Topics that relate to the global goals for sustainable development for this in-depth study include: food systems, biodiversity, resource management, energy resources, water resources, climate disruption, environmental health, circular economies, and land use. Immersive field-based and experiential learning experiences will be enriched by lectures, readings, group discussions, and civic engagement activities addressing the specific sustainability topic. The course will tackle relevant sustainability challenges and explore potential solutions to address these challenges and make global, local, and personal connections. This course is repeatable up to three times as long as the sustainability topic covered and/or the field study destination are different in each case. (1 to 3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

BIOLO 1215***Introduction to Animal Biology***

1-3 Credit Hours

Students will be introduced to fundamental ecological concepts and principles by studying a particular animal species or related group of animals. Course content will focus on understanding the natural history, behavior, evolution, and conservation of the animal(s) selected. Immersive field-based excursions and experiential learning experiences will be enriched by lectures, readings, and discussions addressing research techniques, species and ecosystem management, and conservation initiatives shaping the long-term preservation of the animal group. This course is repeatable up to three times as long as the animal group studied and/or the field study destination is different in each case. (1 to 3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.**Course types:** General Education: Physical/Life Science (A.A.S., A.G.S.)**BIOLO 1800*****Special Project***

1-3 Credit Hours

Special project courses in biology cover topics not otherwise covered by general education courses and other courses in the Catalog for the biology discipline. These courses require direct experience and focused reflection in an in-depth study of a specific biology topic and/or the critical analysis of contemporary issues in biology. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of biology concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). This course may be taken four times for credit as long as a different topic is selected each time.

Prerequisite: Course requires Reading Placement Test Score-Category One.**Course types:** General Education: Physical/Life Science (A.A.S., A.G.S.)**BIOLO 1820*****Selected Topics I***

3 Credit Hours

Introductory exploration and analysis of selected topics in biology with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (8 lab hours)

Prerequisite: Course requires Reading Placement Category One.**Course types:** General Education: Physical/Life Science (A.A.S., A.G.S.)**BIOLO 1821*****Selected Topics II***

3 Credit Hours

Introductory exploration and analysis of selected topics in biology with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Category One.**Course types:** General Education: Physical/Life Science (A.A.S., A.G.S.)**BIOLO 1840*****Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within biology to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (2 to 8 lab hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.**Course types:** General Education: Physical/Life Science (A.A.S., A.G.S.)**BIOLO 2150*****Ecology***

4 Credit Hours

Introduction to the field of ecology. Ecological principles and concepts pertaining to ecosystems, communities and populations are examined. Emphasis is given to experimentation in the field. (2 lecture hours, 4 lab hours)

Prerequisite: BIOLO 1151 and BIOLO 1152 or equivalent. Course requires Reading Placement Category One.**Course types:** General Education: Physical/Life Science (A.A.S., A.G.S.)**BIOLO 2151*****Cell Biology***

4 Credit Hours

Advanced examination of the morphology and physiology of eukaryotic and prokaryotic cells. Coverage includes organelle structure and function, cell membranes, the cytoskeleton, extracellular matrices, enzymes, bioenergetics, cell division, gene expression, cell movement, and cell communication. Course is intended for the biological science major and has a lab component. (3 lecture hours, 2 lab hours)

Prerequisite: BIOLO 1152 with a grade of C or better, or equivalent and CHEM 1552 with a grade of C or better, or equivalent. Course requires Reading Placement Category One.**Course types:** General Education: Physical/Life Science (A.A.S., A.G.S.)**BIOLO 2800*****Special Project***

1-3 Credit Hours

Advanced experiential courses in biology cover topics not otherwise covered by general education courses and other courses in the catalog for the biology discipline. These courses require direct experience and focused reflection in an in-depth study of a specific biology topic and/or the critical analysis of contemporary issues in biology. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of biology concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in Biology or consent of instructor.

Course requires Reading Placement Test Score-Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BIOLO 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

Botany (BOTAN)

BOTAN 1310***Ethnobotany***

4 Credit Hours

This course is designed to introduce students to the origins of many of the plants and plant products that are an important part of everyday life, and the ways that the development of different cultures has been influenced by plants throughout history. Topics covered include basic plant morphology, plant reproduction, origins of major agricultural crops, economically important plant products, and medicinal and poisonous plants. Designed for non-science majors and interested students. (3 lecture hours, 2 lab hours) ** Note ** This course, taken after Spring 2017, will NOT count towards the Life Science requirement in the AA, AS, AFA or AAT degrees.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 1320***Prairie Ecology***

4 Credit Hours

The organisms, environments and ecological processes of the tallgrass prairie ecosystem are examined through lecture, discussion and field studies. Identification of prairie plants, with an emphasis on species in northern Illinois, is included. Students participate in College of DuPage's prairie reconstructions. Field trips and activities are required. BIOLO 1100 or BIOLO 1151 is recommended. (2 lecture hours, 4 lab hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 1330***Natural Resources Management***

3 Credit Hours

This course serves as an introduction to management and restoration of native Illinois ecosystems. Regional wetland, woodland, and grassland ecosystems will be studied. Common habitat maintenance strategies, including integrated weed management, will be studied in lecture and in the field. An emphasis will be placed on the training of volunteers in ecological restoration. (2 lecture hours, 2 lab hours)

Prerequisite: This course requires Reading Placement Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 1800***Special Project***

1-3 Credit Hours

Special project courses in botany cover topics not otherwise covered by general education courses and other courses in the catalog for the botany discipline. These courses require direct experience and focused reflection in an in-depth study of a specific botany topic and/or the critical analysis of contemporary issues in botany. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of botany concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). This course can be taken four times for credit as long as a different topic is chosen. (1 to 3 lecture hours, 1 to 3 lab hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 1820***Selected Topics I***

3 Credit Hours

Introductory exploration and analysis of selected topics in botany with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 1821***Selected Topics II***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within botany to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (2 to 8 lab hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 2350***Introduction to Botany***

4 Credit Hours

Introduction to Botany, including classification, morphology, anatomy, physiology and diversity. Includes lab and field experiences. (2 lecture hours, 6 lab hours)

Prerequisite: BIOLO 1151.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 2360***Local Flora***

3 Credit Hours

Explores the ecology and distribution of vascular plants from selected study areas. Includes the basic principles and methods of plant taxonomy: identification, classification, herbarium techniques. Study areas in addition to the College of DuPage campus will be indicated in the current class schedule. Costs vary. (1 lecture hour, 4 lab hours)

Prerequisite: BIOLO 1152 or BOTAN 2350 or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 2800***Special Project***

1-3 Credit Hours

Advanced experiential courses in botany cover topics not otherwise covered by general education course and other courses in the catalogue for the botany discipline, while building upon academic knowledge and skills acquired in introductory-level botany classes. These courses required direct experience and focused reflection in an in-depth study of a specific botany topic and/or the critical analysis of contemporary issues in botany. They are targeted of self-selected students with an interest in the subject matter and involved active participation. The course delivery incorporates an experiential component of no less than 30 % but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex botany concepts, theories, principles, and methods with a specific focus. All course require and orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) (1 to 3 lecture hours, 1 to 3 lab hours)

Prerequisite: At least one course in Botany or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

BOTAN 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Internship - Advanced (Transfer) -- Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

Business (BUSIN)

BUSIN 1100***Introduction to Business***

3 Credit Hours

Introduction to the environment and functions of business. Organization and operation of business, the relationships of business to society, and types of business are surveyed. Marketing, finance, production and human resource management are covered. Careers in business are explored. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

BUSIN 1111***Customer Service***

3 Credit Hours

Interacting with customers and responding to customer concerns in-person, on the telephone and electronically. Customer service throughout the organization and as a system for meeting customer expectations. Verbal and nonverbal communications as they relate to customer service. Methods for responding to different types of customers. (3 lecture hours)

BUSIN 1120***Fundamentals of Personal Investing***

3 Credit Hours

Overview of personal financial planning and the personal investing process to prepare students for long-term financial health. (3 lecture hours)

BUSIN 1155***Diversity in Business***

3 Credit Hours

Introduction to the role of diversity in the environment and functions of business. Surveys the impact of diversity on organizations, teamwork, strategy and customer relationships. Individual and group perspectives will be explored. Gender, race, ethnicity, generation, social class and other bases for diversity will be considered. (3 lecture hours)

BUSIN 1161***Entrepreneurship***

3 Credit Hours

Exploration of the entrepreneurial mindset in individuals as it relates to career, business, social responsibility, and startup growth. Students will analyze gaps and opportunities in the marketplace and identify feasibility of a business. Marketing, strategy, ideas, failure, experimentation, investing, bootstrapping, finances, critical thinking, mindset, and various business and career models will be common themes. (3 lecture hours)

BUSIN 1170***Electronic Business/Commerce***

3 Credit Hours

Overview of resources, knowledge, skills, practices and techniques necessary to conduct business online. Explores nature and impact of e-commerce on business and business operation, resources required versus available resources, e-management, Customer Relationship Management (CRM), ordering systems, end-to-end marketing, and performance and control systems. (3 lecture hours)

BUSIN 1180***Dispensary Operations***

2 Credit Hours

Introduction to the functions and operations of a cannabis dispensary. Organization and operation of a dispensary will include customer service, retail sales, logistics, human resources, and inventory management procedures. (2 lecture hours)

Prerequisite: HORT 1100 or concurrent enrollment in HORT 1100 or consent of instructor.

BUSIN 1800***Special Project***

1-4 Credit Hours

Special project courses in business topics not otherwise covered by general education courses and other courses in the catalog for the business discipline. These courses require direct experience and focused reflection in an in-depth study of a specific Business topic and/or the critical analysis of contemporary issues in business. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of business concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit as long as different titles are chosen. (1 to 3 lecture hours, 1 to 3 lab hours)

BUSIN 1840***Independent Study***

1-3 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required.

BUSIN 2200***Small Business Budgeting & Finance***

3 Credit Hours

A hands-on study in the preparation and analysis of reports in the budgeting system. Includes detailed budgets for various departments; budgeted income statements and balance sheets with supporting schedules will be prepared. Special emphasis on the financial manager's role in budgeting and financial planning as well as the relationship of the budgeting process with the long-term corporate goals and objectives. (3 lecture hours)

Prerequisite: BUSIN 1100 or BUSIN 1161.

BUSIN 2210***Principles of Finance***

3 Credit Hours

The theoretical and conceptual framework used by financial managers to reach decisions in a dynamic economy. Emphasis is placed on financial decision making related to capital budgeting, capital structure and working capital management. (3 lecture hours)

Prerequisite: ACCOU 2140 or equivalent or consent of instructor.

Recommended: BUSIN 1100.

BUSIN 2220***Financial Analysis and Valuation***

3 Credit Hours

The process of understanding the risks and profitability of a firm through analysis of reported financial statements. It includes a comprehensive review of business strategy, financial strategy and the industry environment, resulting in providing information for management and investment decisions. (3 lecture hours)

Prerequisite: BUSIN 1100, ACCOU 2140, and ACCOU 2150 or consent of instructor.

BUSIN 2255***International Business***

3 Credit Hours

Theoretical and descriptive exploration of the interdependent world of international business. Explores globalization trends, international trade theories, regulations affecting trade, regional economic integration, and the impact these factors have on developing nations. Examines how company functions such as marketing, finance and management operate in the international setting. Special emphasis is placed on strategy development and the role of culture. Completion of BUSIN 1100 or equivalent is recommended prior to enrollment. (3 lecture hours)

Course types: Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

BUSIN 2800***Special Project***

1-4 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in the discipline or consent of instructor.

BUSIN 2860***Internship for Business***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and Business 1100, 2.0 cumulative grade point average; six semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Associate Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

BUSIN 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

BUSIN 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

BUSIN 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Associate Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Business Law (BUSLW)

BUSLW 1180***Cannabis Law and Policy***

1 Credit Hour

Overview of regulations and legal issues of cannabis cultivation and commerce. Federal, state and local laws will be discussed. (1 lecture hour)

Prerequisite: HORT 1100 or CRIMJ 1100 or concurrent enrollment in HORT 1100 or CRIMJ 1100.

BUSLW 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

BUSLW 2205***Legal Environment of Business***

3 Credit Hours

A survey of the American legal system that provides students with an understanding of the legal framework within which formal business organizations operate. The course includes principles of law as they relate to business policies, ethics, and corporate social responsibilities. Emphasis is placed on government regulation of business, consumer protection, torts, labor law, employment discrimination law, different types of business organizations and environmental law. Topics are discussed and analyzed through legal case studies and real life examples. (3 lecture hours)

BUSLW 2211***Business Law I***

3 Credit Hours

Course provides a study of laws encountered in the operation of business. Students are introduced to our Anglo-American system of law, its sources, history and development. The course includes the law of contracts, torts, product liability, intellectual property, the Constitution, and various other laws that are analyzed in the context of business. Emphasis is on the principles of contract law, including traditional and online versions, the Uniform Commercial Code, sales, leases, and commercial paper, are discussed and analyzed through case studies and examples. (3 lecture hours)

BUSLW 2212***Business Law II***

3 Credit Hours

Principles of the law of agency, partnerships, corporations, wills, trusts, accounting law and liability bankruptcy, and real property are discussed and analyzed through the use of the Model Corporation Act, the Illinois Business Corporation Act, cases and problems. Emphasis is placed on the Uniform Commercial Code, including negotiable instruments, holder in due course, credit and secured transactions. (3 lecture hours)

BUSLW 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

BUSLW 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Central Sterile Processing Distribution (CSPD)

CSPD 1111***Central Sterile Processing and Distribution***

3 Credit Hours

Students will be introduced to the fundamentals of central sterile processing, supplies, services, distribution of instrumentation, and equipment. Upon successful completion students will be eligible to take the International Association of Healthcare Central Service Material Management (IAHCSCMM) Provisional Examination as well as the Certification Board of Sterile Processing and Distribution (CBSPD) Sterile Processing and Distribution Technician Certification Examination. (3 lecture hours)

CSPD 1211***Central Sterile Processing and Distribution Practicum***

3 Credit Hours

Students will prepare for work in the sterile processing department by performing decontamination, sterilization, and distribution skills. This course will offer the student hands-on experience within a hospital or surgical center setting. (2 lecture hours, 1 lab hour, 4.5 clinical hours)

Prerequisite: CSPD 1111 with a grade of C or better, or equivalent, or concurrent enrollment in CSPD 1111. This course has pre-registration requirements; please see registration packet for details.

Chemistry (CHEMI)

CHEMI 0485***Basic Laboratory and Computation Chemistry***

3 Credit Hours

This is a preparatory class for students who plan to enroll in CHEMI 1551, but have not yet satisfied the high school chemistry prerequisite. Topics include the metric system, dimensional analysis, physical and chemical properties of matter, chemical formulas and equations, stoichiometry, solutions, and gas laws. Students will record and analyze qualitative and quantitative measurements in the laboratory. Note: This class does not meet a Physical Science General Education Requirement, nor does it count as college-level credit. (2 lecture hours, 2 lab hours)

CHEMI 1105 (P1 903L)***Contemporary Chemistry***

4 Credit Hours

Introduction to chemical concepts using practical issues and applications to illustrate the principles of chemistry. The language of chemistry, scientific method and measurement, experimentation with data collection, and current issues with application to chemical principles. One year of high school algebra is recommended. This course is not a prerequisite for CHEMI 1212. (3 lecture hours, 3 lab hours)

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 1211 (P1 902L)***Survey of General Chemistry***

5 Credit Hours

This is a one-semester survey of general inorganic chemistry intended for health science majors. Topics include: formula naming, atomic structure, stoichiometry, gas laws, solutions, equilibria, oxidation-reduction, acid-base theory, and nuclear chemistry. Not intended for science or engineering majors; not intended for pre-professional programs (e.g. pre-med). (4 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better, or a qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. This course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 1212***Survey of Organic Chemistry***

5 Credit Hours

Introduction to organic chemistry. Nomenclature, structure, physical properties, reactions, and synthesis of major organic functional groups. Intended for health science majors. (4 lecture hours, 3 lab hours)

Prerequisite: CHEMI 1211 with a grade of C or better, or equivalent or CHEMI 1551 with a grade of C or better, or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 1551 (P1 902L/CHM 911)***Principles of Chemistry I***

5 Credit Hours

This is the first course of a two-semester sequence of general chemistry for science and engineering majors. Topics include: measurement, the mole concept, composition and reaction stoichiometry, types of reactions, thermochemistry, atomic theories, chemical periodicity, bonding, molecular geometry, and properties and theories of the gaseous, liquid, and solid states. Laboratory includes both qualitative and quantitative analysis. (4 lecture hours, 3 lab hours)

Prerequisite: MATH 1428 (or college equivalent) or MATH 1431 (or college equivalent) with a grade of C or better, or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score and one year high school chemistry with a satisfactory grade or CHEMI 0485 (or college equivalent) with a grade of C or better.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 1552 (CHM 912)***Principles of Chemistry II***

5 Credit Hours

This is the second course of a two-semester sequence of general chemistry for science and engineering majors. Topics include: properties of solutions, chemical kinetics, equilibrium, acid-base theory and equilibria, solubility equilibria, electrochemistry, thermodynamics, coordination chemistry, and nuclear chemistry. Laboratory includes both qualitative and quantitative analysis. (4 lecture hours, 3 lab hours)

Prerequisite: CHEMI 1551 with a grade of C or better, or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 1800***Special Project***

1-3 Credit Hours

Special project courses in chemistry cover topics not otherwise covered by general education courses and other courses in the catalog for the chemistry discipline while building upon academic knowledge and skills acquired in introductory-level chemistry classes. These courses require direct experience and focused reflection in an in-depth study of a specific chemistry topic and/or the critical analysis of contemporary issues in chemistry. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of chemistry concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 1821***Selected Topics II***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2203***Introduction to Biochemistry***

3 Credit Hours

Introduction to the biochemistry and metabolism of carbohydrates, lipids, proteins, and nucleic acids. Survey of molecular genetics and the tools and techniques of genetic engineering. This course does not have a laboratory component. Students receive credit for either CHEMI2203 or CHEMI2213. (3 lecture hours)

Prerequisite: CHEMI 1212 with a grade of C or better, or equivalent or CHEMI 2551 with a grade of C or better, or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2213***Introduction to Biochemistry With Laboratory***

4 Credit Hours

Introduction to the biochemistry and metabolism of carbohydrates, lipids, proteins, and nucleic acids. Survey of molecular genetics and the tools and techniques of genetic engineering. Investigation of reactions of carbohydrates, lipids, proteins and nucleic acids in the laboratory. Students receive credit for either CHEMI2213 or CHEMI2203. (3 lecture hours, 3 lab hours)

Prerequisite: CHEMI 1212 with a grade of C or better, or equivalent or CHEMI 2551 with a grade of C or better, or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2551 (CHM 913)***Organic Chemistry I***

5 Credit Hours

This is the first semester of a one-year course in Organic Chemistry for science and engineering majors. Topics include bonding principles, functional groups and their properties, isomerism, stereochemistry, nomenclature, synthesis and reactions of alkanes, cycloalkanes, alkenes, cycloalkenes, alkynes, and alkyl halides. Mechanisms include addition, elimination, rearrangement, and substitution. Laboratory emphasizes small-scale techniques, separations, purifications, syntheses, mass spectrometry, infrared spectroscopy and proton nuclear magnetic resonance spectroscopy. (4 lecture hours, 3 lab hours)

Prerequisite: CHEMI 1552 with a grade of C or better, or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2552 (CHM 914)***Organic Chemistry II***

5 Credit Hours

This is the second semester of a one-year course in Organic Chemistry for science and engineering majors. Topics include nomenclature, properties, reactions and synthesis of aromatic compounds, organometallics, alcohols, thiols, phenols, ethers epoxides, aldehydes, ketones, conjugated dienes, enolates, enols, carboxylic acids and their derivatives, and amines. Mechanisms include electrophilic and nucleophilic aromatic substitution, nucleophilic addition, Diels Alder, and nucleophilic acyl substitution. Laboratory emphasizes syntheses with analysis using any or all of the following: mass spectrometry, infrared spectroscopy, ultraviolet spectroscopy, proton and carbon-13 nuclear magnetic resonance spectroscopy. (4 lecture hours, 3 lab hours)

Prerequisite: CHEMI 2551 with a grade of C or better, or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2800***Special Project***

1-3 Credit Hours

Special project courses in chemistry cover topics not otherwise covered by general education courses and other courses in the Catalog for the chemistry discipline. These courses require direct experience and focused reflection in an in-depth study of a specific chemistry topic and/or the critical analysis of a contemporary issue in chemistry. They are targeted to self-selected students with an interest in the subject matter involve active participation. The course delivery incorporates an experimental component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning and/or the practical application of chemistry concepts, theories, principle and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) (1 to 3 lecture hours, 1 to 3 lab hours)

Prerequisite: At least one course in Chemistry or consent of the instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2820***Advanced Selected Topics I***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: One other course in the discipline and consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

CHEMI 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

Chinese (CHINE)

CHINE 1100

Civilization and Culture of China

3 Credit Hours

This course is a brief introduction to the culture, history, political institutions, social, philosophical and economic development of China from ancient times to the present. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

CHINE 1101

Elementary Chinese I

4 Credit Hours

Introduction to standard, modern Mandarin Chinese: pronunciation, idiomatic expressions, speech patterns and characters for the beginning students. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

CHINE 1102

Elementary Chinese II

4 Credit Hours

A continuation of CHINE 1101 with emphasis on listening, speaking, and reading and writing complex sentences. For students who have successfully completed CHINE 1101 or equivalent or three years of high school Chinese. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

CHINE 1800

Special Project

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One.

CHINE 1840

Independent Study

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

CHINE 2201

Intermediate Chinese I

4 Credit Hours

This course is a continuation of CHINE 1102 with emphasis on further accuracy and comprehension in listening, reading, speaking, and writing. More Chinese characters are introduced. For students who have successfully completed CHINE 1102 or equivalent or four years of high school Chinese. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

CHINE 2202 (H1 900)

Intermediate Chinese II

4 Credit Hours

Continuation of CHINE 2201. More Chinese characters are introduced. For students who have successfully completed CHINE 2201 or equivalent or five years of high school Chinese. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

CHINE 2860

Internship (Career & Technical Ed)

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CHINE 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CHINE 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CHINE 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

College Skills (COLLG)

COLLG 1100***College Path QuickStart***

1 Credit Hour

This course is an introduction to the first semester experience at College of DuPage, designed to assist students in taking initial steps toward developing a successful academic path. It will familiarize students with the campus community, introduce academic & career pathways, and explore initial resources to help students engage in academic planning. Students will have the opportunity to learn basic skills for a successful transition to the College of DuPage environment, and to connect with a mentor support system for continued success and growth. (1 lecture hour)

COLLG 1105***Career Development***

2 Credit Hours

Designed to assist students with integrating into the career development process. Emphasis on developing skills related to self-awareness, career path choices, career decision-making, and strategies for career action in an evolving work environment. (2 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

COLLG 1110***Interpersonal Skills for Life and Work***

2 Credit Hours

Emphasizes student's understanding of human relations, identifying and decreasing self-defeating behaviors and exploring options for interpersonal development. Through an experiential approach, students have an opportunity to develop more satisfying and effective interpersonal skills for enhancing personal and work relationships, self-esteem, and understanding of behavior differences among persons from diverse backgrounds. (2 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

COLLG 1115***College Success Skills***

2 Credit Hours

An introduction to the strategies necessary for academic and personal success at the college level. Students will be given an orientation to the culture of higher education, transition to a college environment, and useful resources. A range of skills will be covered, including self-care, emotional intelligence, time management, goal setting, note-taking, reading for comprehension, and developing self-awareness. (2 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

COLLG 1116***Research in the Information Age***

1 Credit Hour

Students will be introduced to the concepts and values of information literacy. Students will develop critical thinking skills by formulating research strategies, determining information source credibility, and effectively communicating their learned information to an audience. Students will examine the organization and ethical use of information and utilize research tools in the discovery process. (1 lecture hour)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

COLLG 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Computer and Information Science (CIS)

CIS 1110***Introduction to Informatics***

2 Credit Hours

Prepares students for technological challenges prevalent in professions where human interaction is combined with information science, ethics, privacy, security, information processing, communication software, productivity software, and the transformation of data to information for decision making. (2 lecture hours, 1 lab hour)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIS 1120***The Internet***

2 Credit Hours

Introduces the fundamental skills and knowledge needed to master and use the Internet. Provides an understanding of the concepts behind the Internet as a tool as well as hands-on activities using the Internet. Intended for a broad audience. (2 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIS 1130***Windows Basics***

2 Credit Hours

Introduction to the Windows operating system and its Graphical User Interface (GUI). (2 lecture hours)

Prerequisite: Basic computer mouse skills.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIS 1140***Cloud Essentials***

3 Credit Hours

Introduces a dynamic Web with cloud based applications providing the ability for people to collaborate. Covers legal and ethical concerns regarding responsible use of cloud based technology. Includes cloud computing concepts such as implementation, benefits and risks, and major service providers. Covers areas in preparation for current CompTIA Cloud Exam. (3 lecture hours)

Prerequisite: CIS 1110 or CIS 1120 or CIS 1150 or CIT 1100, with a grade of C or better or equivalent, or consent of instructor.

CIS 1150 (BUS 902)***Understand Computers/Information/Systems***

3 Credit Hours

An overview of the computing field and its typical applications. Covers key terminology and components of computer hardware, software and operating systems. Other topics include systems development methods, management information systems, programming languages, communications, networks, application software, the Internet and career opportunities. Microcomputer applications include word processing, spreadsheet, database, and presentation software. (3 lecture hours, 1 lab hour)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIS 1160***Windows Command Shell***

3 Credit Hours

An introduction to Windows Operating System file configuration, environment management, and task automation. Contains coverage of file system configuration, utilities, and security access. Open source command line and scripting utility software used in industry includes Microsoft PowerShell to effectively prepare students for working in a command driven Windows environment. Prior experience with mouse, keyboard, and general knowledge of Microsoft Windows recommended. (3 lecture hours)

CIS 1170***World of Data Science***

1 Credit Hour

Students will develop an understanding of the world of data science by exploring how it applies to multiple disciplines such as business, engineering, technology, health science, medicine, social science, and education. Industry professionals will provide insights and practical applications in a seminar format. (1 lecture hour)

CIS 1180***Data Communication & Networking***

3 Credit Hours

The course covers principles of wired and wireless network devices, configuration, and data network systems operation. Current technologies such as mobile, cloud, virtualization, industrial and enterprise networking are also covered in this course. Discuss options of industry certification exam. (3 lecture hours)

Prerequisite: CIS 1150 with a grade of C or better, or equivalent or CIS 1160 with a grade of C or better, or equivalent or consent of instructor.

CIS 1199***Introduction to Game Industry***

2 Credit Hours

An introduction to video game industry and development. This course explores the history of games, the game development cycle, game careers, and the social impact of games. (2 lecture hours)

CIS 1200***Game Design***

3 Credit Hours

This course introduces pre-production game design techniques. Topics include project scope, game genres, High Concept Documentation, game pitch, game deconstruction, game competitors, peer game design review, storytelling and narrative, character design, world building, game items/objects/equipment/vehicle design, User interface and User Experience (UI/UX), game flow, gameplay cores, game mechanics, game balancing methods, visual style, audio style, accessibility for the handicapped, game prototyping, Quality Assurance (QA), and Game Design Documentation (GDD). (3 lecture hours)

CIS 1201***Advanced Game Design***

3 Credit Hours

This course covers advanced pre-production game design techniques. Topics include design principles, game loop and core mechanic flaws, in-game combat, in-game cameras, player/NPC movement, design proposal from Request For Proposal (RFP), pillars of game design, core loops, gameplay mechanics, narrative elements, product production phases, Game Design Documentation (GDD), game pitch, product presentations. and prototyping. (3 lecture hours)

Prerequisite: CIS 1200 with a grade of C or better, or equivalent or consent of instructor.

CIS 1205**Office Ste SOFTWARE and Integration**

3 Credit Hours

Introduction to the integrative aspects of business suite software. Concepts related to the creation and editing of word processing, spreadsheet, database, and presentation files. Includes the principles of document integration as it relates to Microsoft Office suite applications as a decision-making tool with realistic business scenarios. This course prepares students for MOS Certification. (3 lecture hours)

Prerequisite: CIS 1110 with a grade of C or better, or equivalent or CIS 1130 with a grade of C or better, or equivalent or CIS 1150 with a grade of C or better, or equivalent or consent of instructor.

CIS 1211**2D Game Development**

3 Credit Hours

Computer game development including player controls, sound, music and animation. Two-dimensional games will be created using game editors and development tools. Recommended courses: CIS 1200 and CIS 1400. (3 lecture hours)

CIS 1212**Game Asset Creation**

3 Credit Hours

This course covers the most up-to-date methods in developing functional audio and visual assets for games, as well as file optimization, file conversion and asset porting techniques. Topics in game asset creation and file optimization include, functional 2D/3D asset creation, shaders, rigging, audio, file types, file conversions, file optimization, and file porting to game engines. (2 lecture hours, 2 lab hours)

CIS 1221**Data Analysis with Spreadsheets**

3 Credit Hours

Introduction to spreadsheets. Organizing and analyzing numerical data for business decision making in statistical and financial analyses. This course includes spreadsheet preparation, design, creation, data calculation, manipulation, database, and visualization. (3 lecture hours)

CIS 1222**Business Intelligence Analysis and Visualization**

3 Credit Hours

This course covers advanced spreadsheet features and analytical concepts for Business Intelligence (BI) applications. Students will learn customization, automation features, advanced data analysis, and BI tools. (3 lecture hours)

CIS 1230**Database Application**

3 Credit Hours

Relational database management course including database design, database creation, database maintenance, form creation, report creation, query creation, and macro creation. Provides instruction in application development and programming using a representative database management package. (3 lecture hours)

CIS 1240**Presentation Graphics - Windows Based**

2 Credit Hours

Introduction to the design and use of presentation graphics for microcomputers in a Windows-based environment. Includes basics of visual design, numeric charts, text charts, diagrams, organization charts, screenshow presentations and other advanced topics. (2 lecture hours)

Prerequisite: CIS 1110 or CIS 1130 or CIS 1150 or consent of instructor.

CIS 1250**Intro to Project Management Software**

2 Credit Hours

Introduction to project management software to effectively control project development. Topics covered include application of software in planning, timelines, communication, resources, and costs. (2 lecture hours)

Prerequisite: CIS 1150 or consent of instructor.

CIS 1270**IT Proposals and Presentations**

2 Credit Hours

Introduces tools and techniques used to develop and present effective proposals for IT projects. Audience identification, stakeholder classification and decision making criteria will be covered.

Recommended: CIS 1150 with a grade of C or better, or equivalent. (2 lecture hours)

CIS 1300**Web Design Software**

3 Credit Hours

Creation of Web sites using Web design software such as DreamWeaver or FrontPage. Topics include Web site design, styles, graphics, tables, frames, forms, and layers. (3 lecture hours)

Prerequisite: CIS 1120 and CIS 1130 or CIS 1150 or consent of instructor.

CIS 1310**HTML and CSS**

3 Credit Hours

An introduction to the design, creation, and maintenance of web pages and websites using HTML (Hyper Text Markup Language) and CSS (Cascading Style Sheets). Includes web page and website design concepts, web design standards, and critical evaluation of websites. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1150 or CIS 1400 recommended

CIS 1311**Advanced HTML and CSS**

3 Credit Hours

Advanced concepts regarding the creation and enhancement of web pages and websites conforming to UX (User Experience) guidelines using the HTML (Hyper Text Markup Language) Living Standard and CSS (Cascading Style Sheets) Level 3 modules and beyond. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1310 with a grade of C or better, or consent of instructor.

CIS 1400**Programming Logic and Technique**

4 Credit Hours

An introduction to computer-based problem-solving techniques. Includes software design tools such as structure charts, Input Processing Output (IPO) charts, flowcharts, pseudocode, Unified Modeling Language (UML) diagrams, and Graphical User Interface (GUI) wireframe prototypes. Concepts such as documentation, structured design, modularity, Object Oriented Program (OOP) design, and event driven programming are covered. Programming of algorithms are implemented using a high level language that emphasize structured and object oriented design techniques. (3 lecture hours, 2 lab hours)

Prerequisite: MATH 0482 with a grade of C or better, or equivalent or MATH 1115 with a grade of C or better, or equivalent or a qualifying score on the mathematics placement test or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIS 1410***Introduction to Human Computer Interaction***

3 Credit Hours

Introduction to basic concepts in theory and practice of (HCI) Human Computer Interaction, a discipline concerned with design, implementation, and evaluation of interactive computing systems for human use. Emphasis is on the structure of communication between consumers and computers, capabilities of people to use computers, and concerns that arise in the process of designing and building interfaces between humans and computers. Particular focus is placed on practical design and usability between people and computing systems. (3 lecture hours)

Prerequisite: CIS 1400 or equivalent.

CIS 1450***Intro to Linux/Unix Operating Systems***

3 Credit Hours

Introduction to Linux/Unix, a multi-user, multi-processing, interactive, real time operating system. Emphasis on building a foundation to understand and effectively use the filesystem, utilities, and processes in a command line shell environment. Practical demonstration of operating system concepts in the Linux operating system. (3 lecture hours)

Prerequisite: CIS 1150 or CIS 1160 or CIT 1122 or equivalent or consent of instructor.

CIS 1510***Graphical User Interface Programming***

4 Credit Hours

Introduction to event-driven programming in the Windows environment and design techniques used to create the Windows Graphical User Interface (GUI). Includes program design, program syntax and control structures, forms and controls. (4 lecture hours)

Prerequisite: CIS 1130 and CIS 1400 or consent of instructor.

CIS 1600***Fundamental Principles Operating Systems***

3 Credit Hours

Fundamental principles of operating systems, process execution, scheduling, memory management, concurrent processes, distributed processing, deadlock, security, and related topics. Also examines current microcomputer, mid-range computer, and mainframe operating systems. The following courses are strongly recommended: CIS 1130 and CIS 1160. (3 lecture hours)

CIS 1610***Windows Client OS***

3 Credit Hours

Introduces theoretical and practical concepts of local area network on the Microsoft Windows desktop Operating System (OS). Includes installing and configuring the client OS, administering users, managing devices, organizing file system, establishing security, and installation and configuration of networking components. Covers network and performance monitoring tools provided by the OS and the establishment of baselines to troubleshoot problems. This course may be taken four times for credit as new versions are released. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1180 with a grade of C or better, or equivalent or consent of instructor.

CIS 1620***Windows Server OS***

3 Credit Hours

Introduces administration of the Windows server Operating System (OS). Includes installing and configuring server operating system, planning security, installing applications, backing up file system, using utilities, managing users, setting network printers, and troubleshooting. Also includes Terminal Services (TS) administration and Network Monitor installation and configuration as well as system recovery functions. This course may be taken four times for credit as new versions are released. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1610 with a grade of C or better, or equivalent or consent of instructor.

CIS 1630***Windows Server Active Directory (AD)***

3 Credit Hours

Advanced administrative course for Windows server, Active Directory Services (ADS) on the Windows network operating system. Includes network administration tasks and tools, management of user and group accounts, organization of shared folders, management of ADS, policy, security, and installation and management of Trees and Forests. This course may be taken four times for credit as new versions are released. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1620 with a grade of C or better, or equivalent or consent of instructor.

CIS 1640***Cybernetic Safety and Security***

3 Credit Hours

An overview of aspects of cybernetic safety and security including business, policy and procedures, communications security, network security, security management, legal issues, political issues, conduct computer security audits, and technical issues. Discussion of new risks, threats, and vulnerabilities associated with the transformation to a digital world. Utilize industry leading procedures for protecting, preventing, and tracking cyber-attacks. Discuss options of industry certification exam. (3 lecture hours)

CIS 1655***AI Technical Essentials***

3 Credit Hours

This course surveys Artificial Intelligence (AI) techniques, theories, and applications. It explores Machine Learning (ML), Computer Vision (CV), Natural Language Processing (NLP), and AI applications. Introduces students to AI project cycles and decision making. Students will explore various social issues, biases, and ethical concerns that surround AI. (2 lecture hours, 2 lab hours)

CIS 1660***Managing Microsoft Windows Server Netwk***

3 Credit Hours

Administration course for managing a Microsoft Windows Server network. Includes configuration, administration, and troubleshooting elements ranging from user accounts to server security. Covers how to create and manage network resources such as file, print and web resources as well as Active Directory (AD) objects. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1620 or equivalent or consent of instructor.

CIS 1670***Planning a Microsoft Win Server Network***

3 Credit Hours

Administration course for planning a Microsoft Windows Server network. Includes overview of network services. Plan for a network infrastructure, network data flow, configuration of routing and switching, Dynamic Host Configuration Protocol (DHCP), and Domain Name Services (DNS). Covers security, network access, server availability, certificates, and problem recovery. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1620 or equivalent or consent of instructor.

CIS 1820***Selected Topics***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as a different topic is selected each time. Prerequisites will vary depending upon the course contents. Skills attained in prerequisites are necessary for successful completion of the course. (3 lecture hours)

CIS 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

CIS 2211***2D Game Scripting***

3 Credit Hours

Introduction to 2D game development using a scripting language. Topics include sprite control, keyboard, mouse, controller, game play, and control of non-playable characters. (3 lecture hours)

Prerequisite: CIS 1211 with a grade of C or better, or equivalent or consent of instructor.

CIS 2212***3D Game Development***

4 Credit Hours

Course covers three-dimensional game development. Students will use 3D game engines and development tools to create fully playable games from design documentation through published executable. Topics to include but not limited to level design documentation, player parameters, perspective views, controls, level creation, terrain, materials, lighting, collision, level streaming, event driven logic, gameplay objectives, artificial intelligence, equipment logic, pickup logic, and graphical user interface. (2 lecture hours, 4 lab hours)

Prerequisite: CIS 1200, CIS 1211, and CIS 1212 recommended

CIS 2214***Virtual Reality Application Development***

3 Credit Hours

This course introduces students to the design and development of virtual reality (VR) software applications. Students will learn about how VR hardware functions, and will utilize industry standard software tools to build software for lab and consumer use. (1 lecture hours, 4 lab hours)

Prerequisite: CIS 2212 with a grade of C or better, or equivalent.

CIS 2220***Game Programming Using C++***

3 Credit Hours

Game programming using C++ libraries to create Windows-based games and simulators. Topics include player controls, sound, music, and animation. (3 lecture hours)

Prerequisite: CIS 2542 with a grade of C or better, or equivalent or consent of instructor.

CIS 2230***Simulation and Serious Game Design***

3 Credit Hours

Introduction to simulation and serious game design which may include military, academic, medical, and training applications. (3 lecture hours)

Prerequisite: CIS 1201 with a grade of C or better, or equivalent or consent of instructor.

CIS 2250***Multiplatform Game Programming***

3 Credit Hours

Game programming for multiplatform development. Topics include player controls, sound, music, and animation. (3 lecture hours)

Prerequisite: CIS 2541 or CIS 2561 or equivalent.

CIS 2252***Advanced Multiplatform Game Programming***

3 Credit Hours

Advanced programming for multiplatforms such as consoles, phones, tablets, and/or hand-held devices. (3 lecture hours)

Prerequisite: CIS 2250 or equivalent.

CIS 2290***Game Development Capstone Project I***

3 Credit Hours

This course provides students with a real-life experience where students will design and develop marketable games from conceptual design through marketable build using industry methodologies and development process that may include agile development process and Scrum methodologies. Topics in Pre-Production, and Production phases will be covered. (6 lab hours)

Prerequisite: CIS 1211 with a grade of C or better or equivalent, and CIS 2212 with a grade of C or better or equivalent.

CIS 2291***Game Development Capstone Project II***

3 Credit Hours

This course serves as the second part of Game Development Capstone Project I. Students will be continuing the project that they started in Game Development Capstone Project II by finishing their marketable product through an alpha build, and promote their games through marketing materials that student teams will develop during the Post-Production phase. (6 lab hours)

Prerequisite: CIS 2290 with a grade of C or better.

CIS 2320**JavaScript Programming**

4 Credit Hours

This course covers the fundamentals of European Computer Manufacturers Association ECMAScript (ESX) which JavaScript is based on. Also covers data types from primitives to objects, as well as operators and expressions. Includes values, types, operators, program structures, control flow, functions, event handling, windows, form validation, animation, cookies, debugging and Regular Expressions (RegEx). (4 lecture hours)

Prerequisite: CIS 1310 and CIS 1400, or equivalents, or consent of instructor.

CIS 2321**Advanced JavaScript Programming**

4 Credit Hours

Covers exploration of advanced objects, arrays, de-structuring, Spread and Rest. Includes generators, exception handling, storage (Local, Cookies, Session and offline). Topics also include Asynchronous JavaScript and XML (Ajax), Promises (fetch), XMLHttpRequest, Proxies, JavaScript Object Notation (JSON), Sets and Maps. (4 lecture hours)

Prerequisite: CIS 2320 with a grade of C or better, or equivalent.

CIS 2330**Introduction to XML**

3 Credit Hours

An exploration of extensible Markup Language (XML) Web technology, highlighting the power of XML to structure data without regard to how the data will be presented. (3 lecture hours)

Prerequisite: CIS 1310 or consent of instructor.

CIS 2331**Advanced XML**

3 Credit Hours

Advanced study of eXtensible Markup Language (XML) Web technology. Covers latest XML technologies relating to XML document validation, query and processing. Also includes formal XML data models, XQuery, XSLT, and Document Object Model (DOM). (3 lecture hours)

Prerequisite: CIS 2330 with a grade of C or better, or equivalent or consent of instructor.

CIS 2332**Game Animation**

3 Credit Hours

Course covers animating for gameplay and in-game cutscenes. Students will design storyboards and translate them into complete animations to be used in gameplay and in-game cutscenes. Topics to include but not limited to storyboarding, rigging, particle effects, audio cues, animation states, in-game camera movements/effects, post process effects, lighting, and in-game cutscene creation. Credit cannot be earned for both CIS 2332 and MPTV 2332. (1 lecture hour, 4 lab hours)

Prerequisite: MPTV 2331 with a grade of C or better or equivalent, or CIS 1212 with a grade of C or better or equivalent, or consent of instructor.

CIS 2335**AJAX**

4 Credit Hours

Advanced study in AJAX (Asynchronous JavaScript and XML) web development. Emphasis is on understanding and implementing basic AJAX techniques to develop highly responsive web pages. Students will examine the use of essential client-side libraries to implement AJAX applications that enhance the user experience and support effective application architecture. (4 lecture hours)

Prerequisite: CIS 2320 with a grade of C or better, or equivalent and CIS 2330 with a grade of C or better, or equivalent or consent of instructor.

CIS 2350**Introduction to ASP.NET**

4 Credit Hours

Introduction to web server programming. Includes server programming models, processing forms, creating dynamic web applications, working within the server application environment, debugging web applications, integrating with the file system and other components, interacting with data sources and other web services, using server programming tools, and developing web server applications. (4 lecture hours)

Prerequisite: CIS 1310 and CIS 1400 or consent of instructor.

CIS 2360**Intro to PHP Programming Language**

4 Credit Hours

Introduces students to the PHP scripting language. Covers history of PHP and compares PHP with dynamic content alternatives such as Perl and CGI. Covers creation of basic PHP scripts, self referring forms, HTTP headers, passing of PHP variables via the URL, debugging, PHP functions, PH flow control and configuration. (4 lecture hours)

Prerequisite: CIS 1400 with a grade of C or better, or equivalent or consent of instructor.

CIS 2420**Microprocessor Assembly Language**

4 Credit Hours

Introduction to the Assembly language of the Intel microprocessor-based microcomputer. Includes the architecture of the microprocessor, the instruction set, memory organization, data representation, and data manipulation. Recommended: Any computer programming experience. (4 lecture hours)

CIS 2440**Shell Programming for Unix/Linux**

3 Credit Hours

Introduction to shell programming. Covers a variety of popular shells used in both UNIX and LINUX operating systems. Includes file security and permissions, filename substitution, shell standard input and output, redirection, file input and output, regular expressions, utilities such as grep, awk, sed and the login environment. Emphasis on shell programming, user defined and shell variables, flow control structures, shell functions, shell built-in commands, and the writing and executing of shell scripts. (3 lecture hours)

Prerequisite: CIS 1450 and any CIS 2000 level-programming language course.

CIS 2455***LINUX System Administration***

3 Credit Hours

Contemporary Linux operating system administration and maintenance course. Emphasizes Linux system installation, management, user account control, file system and services, storage management, system performance, and security. Covers concepts of current Linux industry certification exams. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1450 or equivalent or CIT 1450 or equivalent, or consent of instructor.

CIS 2470***Web Connected Devices***

3 Credit Hours

Introduction to Web of Things (WoT) architecture for communication with devices on the Internet. Topics include Internet of Things (IoT) technology, common IoT applications, and strategies for uniform access to web connected devices. Construction of simple web interfaces practiced with a single-board computer connected to sensors on a network. Basic remote sensor data presentation using Representational State Transfer (REST) architecture and JavaScript Object Notation (JSON) protocols. (3 lecture hours, 1 lab hour)

Prerequisite: CIS 1450 and CIS 2320, both with a grade of C or better or equivalent, or consent of instructor.

CIS 2471***Building Internet of Things (IoT) Devices***

3 Credit Hours

Creation of connected devices on Internet using single-board computers with attached sensors. Topics include Internet of Things (IoT) architecture, single-board computers, sensors, software configuration, and remote device access. Students will design, implement, and test a web connected sensor device on a single-board computer applying IoT principles and using web programming languages. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1180 or CIT 1116 with a grade of C or better or equivalent; and CIS 2470 and CIS 2531, both with a grade of C or better or equivalent; or consent of instructor.

CIS 2485***C++ for Science and Engineering***

3 Credit Hours

Development and application of the C++ language. Emphasis on object-oriented design, programming and documentation of scientific applications. Includes statistical analysis, curve fitting, optimization and engineering, and scientific modeling applications. Topics include language format and syntax, functions, data-storage classes, arrays, structures, introduction to user-defined classes, inheritance, and polymorphism. (2 lecture hours, 2 lab hours)

Prerequisite: MATH 1431 or college equivalent or consent of instructor.

CIS 2531***Introduction to Python Programming***

4 Credit Hours

Introduces the object-oriented programming language of Python. Course focuses on features of Python and develops skills for creating object oriented applications. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 1400 with grade of C or better, or equivalent, or consent of instructor.

CIS 2532***Python Programming and Data Science***

4 Credit Hours

This covers advanced Python Programming Language features with an emphasis on the implementation of Data Science and exploration of the large standard libraries. This course also covers practical data structures, web app development, and optimization. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 2531 with grade of C or better, or equivalent, or consent of instructor.

CIS 2541 (CS 911)***Introduction to C++ Programming***

4 Credit Hours

Introduces C++ Programming, an object-oriented programming language. Includes C++ data types, operators, expressions, control structures, functions, arrays, pointers, strings, Abstract Data Types (ADTs), classes, inheritance, polymorphism, virtual functions and file input/output. Emphasis on building the foundation to understand the capabilities of the C++ programming language and the skills to develop practical procedural and object-oriented applications. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 1400 or consent of instructor.

CIS 2542 (CS 912)***Adv C++ With Data Structure Application***

4 Credit Hours

Covers advanced C++ Programming Language features with data structure applications. Includes object-oriented applications using classes, inheritance, encapsulation, polymorphism and other advanced C++ language features. Emphasis on the use of vectors, pointers, dynamic memory, lists, iterators, stacks, queues, linked lists, binary trees, associative containers, hashing, sequential file access, direct file access, recursive algorithms, sorting and searching techniques. (4 lecture hours)

Prerequisite: CIS 2541 or consent of instructor.

CIS 2561***Introduction to C# .NET***

4 Credit Hours

Introduction to C# .NET (pronounced C-sharp dot NET), an object-oriented, Graphical User Interface .NET programming language. Designed to introduce the .NET platform, the .NET Framework Library, C# control structures, methods, arrays, object-oriented programming, graphical user interface, strings, regular expressions, graphics, files, streams and data base access. Emphasis is on building the foundation necessary to understand the capabilities of the C# programming language and the skills to develop Internet and World-Wide-Web based client/server applications. (4 lecture hours)

Prerequisite: CIS 1510 or CIS 2541 or consent of instructor.

CIS 2562***Advanced C# Programming***

4 Credit Hours

Covers advanced C# programming language features with data structure applications. Includes object oriented applications using classes, inheritance, encapsulation, polymorphism, and other advanced features. Emphasis on the use of Windows Communication Foundation (WCF) Web Services, rich Internet applications, multimedia, data structures, generics, collections, and ASP.NET. (4 lecture hours)

Prerequisite: CIS 2561 with a grade of C or better, or equivalent or consent of instructor.

CIS 2571***Introduction to Java***

4 Credit Hours

Introduction to object-based problem solving in the Java language. Includes encapsulation, class design, objects, polymorphism, and Graphical User Interface (GUI) components. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 1400 with a grade of C or better, or equivalent or consent of instructor.

CIS 2572***Collections in Java***

4 Credit Hours

Development of applications using the Java language. Emphasis on applications involving exception handling, images, animation, files, streams, recursion, generics, collections, containers, menus, toolbars, borders, layout managers, graph applications, and data structures. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 2571 with a grade of C or better, or equivalent or consent of instructor.

CIS 2573***Advanced Java Technologies***

4 Credit Hours

Development of applications using advanced Java technologies, including observers, multi-document interfaces, Model-View-Controllers (MVC), multithreading, networking, Remote Method Invocation (RMI), Java Beans, Java database connectivity, servlets, and Java Server Pages (JSP). (3 lecture hours, 2 lab hours)

Prerequisite: CIS 2572 with a grade of C or better, or equivalent or consent of instructor.

CIS 2590***Swift Programming Language***

4 Credit Hours

An introduction to programming in the Swift language. Topics include variables, constants, strings, operators, collections, memory management, protocols, and protocol extensions. (4 lecture hours)

Prerequisite: CIS 1400 with a grade of C or better or equivalent or consent of instructor.

CIS 2592***iOS Application Development***

4 Credit Hours

An introduction to iOS application development includes the project flow of design through the deployment of iOS mobile applications. Students will learn to design a simple yet marketable iOS mobile application and develop it so that it is ready for deployment to an app store. Current industry-standard iOS environments are used for application design and development. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 2590 with a grade of C or better or equivalent, or consent of instructor required. CIS 1410 recommended.

CIS 2593***Android Application Development***

4 Credit Hours

An introduction to Android application development includes the project flow of design through the deployment of Android mobile applications. Students will learn to design a simple yet marketable Android mobile application and develop it so that it is ready for deployment to an app store. Current industry-standard Android environments are used for application design and development. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 2571 with a grade of C or better or equivalent, or consent of instructor required. CIS 1410 recommended.

CIS 2594***Advanced iOS Application Development***

4 Credit Hours

Advanced topics in iOS application development builds upon mobile applications developed in the iOS Application Development course to include advanced services such as client-server protocols, Fetch API, notifications, database integration, location-based services, 3D graphics, and Augmented Reality (AR). Current industry-standard iOS environments are used for application design and development. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 2592 with a grade of C or better or equivalent, or consent of instructor required.

CIS 2595***Advanced Android Application Development***

4 Credit Hours

Advanced topics in Android application development builds upon mobile applications developed in the Android Application Development course to include advanced services such as client-server protocols, Fetch API, notifications, database integration, location-based services, 3D graphics, and Augmented Reality (AR). Current industry-standard Android environments are used for application design and development. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 2593 with a grade of C or better or equivalent, or consent of instructor required.

CIS 2640***Introduction to Machine Learning (ML)***

4 Credit Hours

This course introduces students to Machine Learning (ML) which is a sub-field of Artificial Intelligence (AI) that uses big data. Discusses classic unsupervised, supervised, and reinforcement learning methods used in the field of data classification, clustering, and optimization. This includes k-means, hierarchical clustering, self-organizing maps, linear regression, decision trees, Naïve Bayes, and optimization techniques such as genetic algorithms. It will also cover accessing interesting datasets, ideas on how to collect data from users, and many different ways to analyze and understand the data once found. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 1655 and CIS 2531 with a grade of a C or better, or equivalent, or consent of instructor.

CIS 2641***Introduction to Natural Language Processing (NLP)***

4 Credit Hours

Students will be introduced to Natural Language Processing (NLP) which is having a rapidly growing presence in everyday lives. NLP is about how computers work with human language. This course provides students with the most widely used techniques, strategies, and tools for NLP. The primary focus will be on the tools available with Python programming language. This course will cover new digital methodologies in contrast to traditional approaches to structure, historical development, and relationships of textual and linguistic analysis. (3 lecture hours, 2 lab hours)

Prerequisite: CIS 1655, and CIS 2531 with a grade of a C or better, or equivalent, or consent of instructor.

CIS 2710***Database Management***

4 Credit Hours

Surveys micro, mini and mainframe database (DB) systems including physical and logical structures, data languages, and database design and administration. Includes client/server, Internet DB environments, data warehousing, Object-Oriented data modeling, On-line Analytic Processing (OLAP) and DB development. DB commercially available database systems are discussed and hands-on experience is given using a specific database system. (4 lecture hours)

Prerequisite: Any college-level programming class or consent of instructor.

CIS 2720***Structured Query Language (SQL)***

4 Credit Hours

Introduction to Structured Query Language (SQL) programming. Includes concepts of relational databases and SQL programming commands. Uses SQL statements to create and maintain database objects. One or more Database Management Systems (DBMS) will be used. No prior SQL programming knowledge is required. (4 lecture hours)

Prerequisite: CIS 1230 and CIS 2710 or equivalent, or consent of instructor.

CIS 2735***Data Analytics and Visualization***

4 Credit Hours

Focus of this course is to correctly use existing software products and gain an overview of current analytics tools in Business Intelligence (BI). Through hands-on assignments and projects, this course teaches students to build insightful and interactive dashboards using a variety of data sources. This hands-on course is designed for database professionals, data analysts, and professionals in business, social, health, and engineering fields. (4 lecture hours)

CIS 2770***Introduction to System Analysis & Design***

3 Credit Hours

Explores the planning, analysis, design, and implementation of computer-based information systems and software applications. Particular focus is placed on planning and workflow using contemporary and traditional system development life cycle (SDLC) phases and contemporary project management methodologies. Topics include soliciting requirements, creating textual and graphical models of functional requirements, design considerations for functional and object-oriented development, project management tools, requirements gathering techniques, process specifications and design, effective input and output design, normalized database design, user interface design, and test plan development. (3 lecture hours)

Prerequisite: ENGL 1101 or ENGL 1105 and CIS 1400, or equivalent, or consent of instructor.

CIS 2775***Information Technology Project Management***

3 Credit Hours

Introduces principles of Project Management as defined by the Project Management Institute (PMI). Students gain hands-on experience with information technology project management procedures to increase basic familiarity with state-of-the-art project management processes. (3 lecture hours)

Prerequisite: CIS 1400 with a grade of C or better, or equivalent or consent of instructor.

CIS 2790***Software Development Capstone Project***

4 Credit Hours

Capstone course combines a range of topics integral to specification, design, implementation, and testing of medium-scale software systems. Focus is on demonstrating software development concepts within an agile Software Development Lifecycle (SDLC) framework. Students apply project management tools within small teams to propose software development projects highlighting human computer interaction (HCI), professionalism, teamwork, and ethical responsibilities throughout the SDLC. Each team presents a functioning software prototype that can be incorporated into a student's portfolio. Recommended for students in their final semester of Software Development AAS Degree. (3 lecture hours)

Prerequisite: Consent of instructor.

CIS 2820***Selected Topics***

1-6 Credit Hours

Intermediate exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as a different topic is selected each time. Prerequisites will vary depending upon the course contents. Skills attained in prerequisites are necessary for successful completion of the course. (1 to 6 lecture hours, 1 to 12 lab hours)

CIS 2840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

CIS 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIS 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Computer and Information Technology (CIT)

CIT 1100***IT Fundamentals***

3 Credit Hours

Students will develop a broad understanding in all areas of Information Technology. Students will be introduced to computer hardware and software concepts, infrastructure, software development and databases. Students will also learn hardware and software installation, basic network connectivity, identification and prevention of basic security risks. This course will prepare students for the CompTIA IT Fundamentals+ certification exam. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIT 1111***Computer and Hardware Maintenance***

3 Credit Hours

Covers aspects of hardware support relating to personal computers (PCs), including system troubleshooting, configuring and maintain PCs, mobile devices, networking and security forensics. Prepares the student for the CompTIA A+ Core exams. (2 lecture hours, 2 lab hours)

CIT 1112***Operating System Maintenance***

3 Credit Hours

Install, configure and maintain operating system software and implement security forensics. Learn to diagnose, resolve, and document common software issues. Understand proper customer support and basic scripting. Prepares the student for the CompTIA A+ Core exams. (2 lecture hours, 2 lab hours)

CIT 1113***Advanced Computer Maintenance Tools***

2 Credit Hours

Covers advanced system maintenance with emphasis on maintaining and repairing computers, data recovery, system restore, cabling, soldering, malicious software detection and removal. (1 lecture hour, 2 lab hours)

Prerequisite: CIT 1111 and CIT 1112, both with a grade of C or better, or equivalent or CompTIA A+ Certification or consent of instructor.

CIT 1114***Apple Mac Operating Systems***

3 Credit Hours

Introduction to configuring and maintaining the Apple Macintosh Operating System (MacOS). Troubleshooting, configuration and upgrading of Apple Mac operating systems will be covered. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1111 and CIT 1112, both with a grade of C or better, or equivalent or consent of instructor.

CIT 1116***Network Essentials***

3 Credit Hours

Course covers principles of wired and wireless network devices, configuration, and data network systems operation. Technologies such as mobile, cloud, and virtualization are also covered in this course. It also prepares the student for the CompTIA Network+ certification exam. Completion of CIT 1100 is recommended. (2 lecture hours, 2 lab hours)

CIT 1120***Network Addressing Fundamentals***

2 Credit Hours

Introduction to numbering systems used in computers and networking systems. Binary, Hexadecimal, Subnetting, Variable Length Subnet Masks (VLSM), Classless Inter-Domain Routing (CIDR), Supernetting, Internet Protocol versions will be covered. Preparation for Cisco CCENT or CCNA. (2 lecture hours, 1 lab hour)

CIT 1121***Introduction to Networks***

3 Credit Hours

Introduction to fundamentals of networking. Highlighting practical and conceptual skills required to understand current and emerging technologies. Outlining basic networking technologies including OSI model, TCP/IP model, networking devices, media types, and network addressing schemes. Basic configuration of routers and switches.

Preparation for Cisco CCNA Certification. Completion of CIT 1120 or equivalent is recommended prior to enrollment. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIT 1122***Routing and Switching Essentials***

3 Credit Hours

Survey of network architecture and operations of routers and switches in a networked environment. Learn to configure and analyze routers and switches. Contrast and implement routing and switching operations.

Preparation for Cisco CCNA. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1121 with a grade of C or better, or equivalent or consent of instructor.

CIT 1123***Scaling Networks, Security, & Automation***

3 Credit Hours

Administration of network architecture and operations of routers and switches in complex environments. Learn to configure, analyze and troubleshoot routers and switches in an advanced complex environment. Preparation for Cisco CCNA. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1122 with a grade of C or better, or equivalent or onsent of instructor.

CIT 1124**Connecting Networks**

3 Credit Hours

Learn and apply practical skills required to configure, implement, and troubleshoot advanced networks. Identify Wide Area Network (WAN) technologies and network services required by converged applications in a complex network. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1123 or equivalent or consent of instructor.

CIT 1125**Network Design & Development**

3 Credit Hours

Design of network infrastructures and services with emphasis on network design principles, theory, and management. Course focuses on designing basic campus, data center, security, voice, and wireless networks. (3 lecture hours)

Prerequisite: CIT 1123 with a grade of C or better, or equivalent or consent of instructor.

CIT 1140**Cloud Essentials**

3 Credit Hours

Introduces a dynamic Web with cloud based applications providing the ability for people to collaborate. Covers legal and ethical concerns regarding responsible use of cloud based technology. Includes cloud computing concepts such as implementation, benefits and risks, and major service providers. Covers areas in preparation for current CompTIA Cloud Exam. (3 lecture hours)

Prerequisite: CIS 1110, CIS 1120, or CIS 1150 with a grade of C or better, or equivalent; or CIT 1100 with a grade of C or better, or equivalent; or consent of instructor.

CIT 1450**Intro to Linux/Unix Operating Systems**

3 Credit Hours

Introduction to Linux/Unix, a multi-user, multi-processing, interactive, real time operating system. Emphasis on building a foundation to understand and effectively use the filesystem, utilities, and processes in a command line shell environment. Practical demonstration of operating system concepts in the Linux operating system. (3 lecture hours)

Prerequisite: CIS 1150 or CIS 1160 or CIT 1122 or equivalent or consent of instructor.

CIT 1612**Windows PC Desktop Operating Systems**

3 Credit Hours

Introduction to Windows operating system support. Topics include install, upgrade, migrate Windows operating system, and configuration of hardware and software applications. Prepares students for Microsoft Certified certification exam. (2 lecture hours, 2 lab hours)

CIT 1613**Enterprise PC Support Technician**

3 Credit Hours

Prepares students to manage and maintain Windows operating system. Topics include managing and maintaining issues related to PC Windows operating system. Prepares students for Microsoft Certified Solution Associate (MCSA) certification. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1612 with a grade of C or better, or equivalent.

CIT 1640**Network Security Fundamentals**

3 Credit Hours

Information security principles for implementing and managing security in enterprise. Review of information security, including terminology and overview of information security management. This course prepares students for CompTIA Security+ examination. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1122 with a grade of C or better, or equivalent or CIT 1116 with grade of C or better, or equivalent or consent of instructor.

CIT 1645**Internet Telephony**

3 Credit Hours

Covers aspects of converging voice, data, messaging, and video using Voice Over Internet Protocol (VoIP) technologies. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1121 with a grade of C or better, or equivalent or consent of instructor.

CIT 1650**Network Project Management**

3 Credit Hours

Introduction to project management tools and methodology as needed for the CompTIA Project+ certification. Topics include project initiation, project planning, estimating and scheduling, team building, controlling cost, budgeting and resource allocation, project quality, and closure. (3 lecture hours)

CIT 1710**Introduction to Servers**

3 Credit Hours

Introduction to server hardware and software technologies and various types of server operating systems. Topics include server hardware, software, storage, disaster recovery, and troubleshooting. Prepares students for Microsoft Certified Solution Associate (MCSA) certification.

The following courses are recommended prior to enrollment: CIT 1112 or CIT 1612. (2 lecture hours, 2 lab hours)

CIT 1825**Selected Topics**

2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

CIT 1840**Independent Study**

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline, and methods of evaluation in coordination with, and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

CIT 2150***Wireless Network Administration***

3 Credit Hours

Introduction to designing, implementing, configuring, troubleshooting and maintaining wireless networks. Learn to configure wireless devices based on current emerging wireless standards. Compare and configure various wireless vendors equipment's in preparation for deployment. Preparation for various wireless certifications including CCNA-Wireless. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1122 with a grade of C or better, or equivalent or consent of instructor.

CIT 2170***Virtualization Fundamentals***

2 Credit Hours

Provides practical skills required to install and configure virtual environments. Topics include hypervisor installation, guest operating system installation, snapshot creation, virtual machine cloning, team management, and virtual machine networking. (1 lecture hour, 2 lab hours)

Prerequisite: CIT 1121 with a grade of C or better, or equivalent or consent of instructor

CIT 2173***Virtualization: Install/Configure/Manage***

3 Credit Hours

Students will develop practical skills required to install and configure VMware virtual vSphere. Topics covered include installation and configuration of ESXi, vCenter server, storage networking, vMotion, high availabilities and data protection. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1122 with a grade of C or better, or equivalent or consent of instructor.

CIT 2175***Information Storage and Management***

3 Credit Hours

Students in this course will develop practical knowledge and skills in information storage technologies. Students will learn about the architectures, features, and benefits of Intelligent Storage Systems (ISM); networked storage technologies such as Fiber-Channel Storage Area Network (FC-SAN), Internet Protocol (IP) Storage Area Networks (SAN), IP-SAN, and Network Attached Storage. Students will engage with backup, replication, archiving, and information security. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1122 with a grade of C or better, or equivalent or consent of instructor.

CIT 2241***Enterprise Network Core Technologies***

3 Credit Hours

Explores implementing core enterprise network technologies including dual stack (IPv4 and IPv6) architecture, virtualization, infrastructure, network assurance, security and automation. This course prepares students for the Cisco Enterprise Network Core Technologies (ENCOR) exam. This course may be repeated two times for credit as the industry certification exam changes. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1123 with a grade of C or better, or equivalent or consent of instructor.

CIT 2242***Enterprise Advanced Routing and Services***

3 Credit Hours

Explores implementation and troubleshooting of advanced routing technologies and services including Layer 3, VPN services, infrastructure security, infrastructure services, and infrastructure automation. This course prepares students for the Cisco Enterprise Advanced Routing and Services (ENARSI) exam. This course may be repeated two times for credit as industry certification exam changes. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 2241 with a grade of C or better, or equivalent or consent of instructor.

CIT 2243***Enterprise Advanced Switching - SWITCH***

3 Credit Hours

Explores basic and multi-layer switching configuration. Includes Spanning Tree Protocol (STP), Virtual Local Area Networks (VLANs), secure integration of VLANs, inter-VLAN routing, First hop redundancy protocols, voice over internet protocol (VoIP), and security. This course prepares students for the CCNP SWITCH Exam. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1124 with a grade of C or better, or equivalent or consent of instructor.

CIT 2244***Enterprise Advanced Troubleshooting - TSHOOT***

3 Credit Hours

Explores methods and tools used to troubleshoot the following: Internet Protocol (IP) communication problems, IP problems, Local Area Network (LAN) switch environments, Virtual Local Area Networks (VLANs) in router and switch environments, Enhanced Interior Gateway Routing Protocol (EIGRP), Open Shortest Path First (OSPF), and Border Gateway Protocol (BGP) problems. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 2241 and CIT 2243, both with a grade of C or better, or equivalent or consent of instructor.

CIT 2251***Enterprise Network Security***

3 Credit Hours

Provides the knowledge and hands-on skills required to design, implement, troubleshoot, and monitor network security. Learn to mitigate network attacks through a working knowledge of network security principles, tools, and configurations. Preparation for Cisco CCNA-Security. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1122 with a grade of C or better, or equivalent or consent of instructor.

CIT 2410***Enterprise Internet Telephony***

3 Credit Hours

Explores components and operation of Voice over Internet Protocol (VoIP). Configuration of Cisco Unified Communications Manager and Cisco Unified Communications Manager Express solutions are covered. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1122 with a grade of C or better, or equivalent or consent of instructor.

CIT 2455***LINUX System Administration***

3 Credit Hours

Contemporary Linux operating system administration and maintenance course. Emphasizes Linux system installation, management, user account control, file system and services, storage management, system performance, and security. Covers concepts of current Linux industry certification exams. (2 lecture hours, 2 lab hours)

Prerequisite: CIS 1450 or CIT 1450, or equivalent, or consent of instructor.

CIT 2510***Cloud Server Computing Services and Administration***

3 Credit Hours

Introduction to cloud computing and administration, core Azure services, core solutions, management tools on Azure, general security and network security features, identity, governance, privacy, and compliance features. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1710 with a grade of C or better, or equivalent or CIS 1620 with a grade of C or better, or equivalent or consent of instructor.

CIT 2511***Advanced Server Configuration***

3 Credit Hours

Prepares students to perform advanced configuration of network server technologies and various types of server services with hands-on practice. Topics include activate directory, certificate services, and group policy. Prepares students for Microsoft Certified Solution Associate (MCSA) certification. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1710 with a grade of C or better, or equivalent or CIS 1620 with a grade of C or better, or equivalent or consent of instructor.

CIT 2631***Cyber Defense***

3 Credit Hours

Introduces network security methodologies used to analyze attack strategies and the countermeasures employed to prevent attacks. Exposes students to the various phases involved in hacking, attacks, countermeasures, and exploit categories. Concepts, principles and techniques are supplemented by hands-on exercises for defending against vulnerabilities and improve network security. The topics are presented in the context of properly securing the network. This course aligns with the CompTIA CySA+ certification exam objectives. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1640 or equivalent or consent of instructor.

CIT 2640***Ethical Hacking***

3 Credit Hours

Introduces network security methodologies used to attack a network and the countermeasures employed to prevent attacks. Exposes students to the various phases involved in hacking, attacks, countermeasures, and exploit categories. Concepts, principles and techniques are supplemented by hands-on exercises for attacking and disabling a network. The topics are presented in the context of properly securing the network. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1640 or equivalent or consent of instructor.

CIT 2651***Computer Forensics I***

3 Credit Hours

Perform data preservation, identification, extraction, documentation and interpretation of computer data. Topics covered include evidence handling, chain of custody, collection, preservation, identification, and recovery of computer data using forensic recovery software and methods. (2 lecture hours, 2 lab hours)

Prerequisite: Recommended: Basic PC navigational skill sets, or CIT 1111, or CIT 1112.

CIT 2652***Computer Forensics II***

3 Credit Hours

A continuation of Computer Forensics I. Extends the use of analysis software and forensics tools. Focuses on network and open source forensics tools. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 2651 with a grade of C or better, or equivalent or consent of instructor.

CIT 2710***Computer Information Technology Capstone***

3 Credit Hours

This Capstone course applies acquired knowledge, skills, and techniques acquired in the Computer Information Technologies AAS Degree. (2 lecture hours, 2 lab hours)

Prerequisite: CIT 1640, CIT 2251, and CIT 2410, all with a grade of C or better, or equivalent or consent of instructor. We recommend students take the capstone course in their last semester.

CIT 2840***Experimental/Pilot Class***

1-6 Credit Hours

Exploration and analysis of topics within the discipline. This course is used to pilot a proposal for a permanent discipline course. This course may be taken four times for credit as long as different topics are selected. (6 lecture hours, 12 lab hours)

Prerequisite: Consent of instructor is required.

CIT 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CIT 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Cosmetology (COSME)

COSME 1101***Introduction to Cosmetology***

3 Credit Hours

Introduction to required safety and decontamination procedures in a salon. Business etiquette in the cosmetology field is introduced. Prepares student for state certification for the Illinois Cosmetology License from the Department of Professional and Financial Regulations. (2 lecture hours, 2 lab hours)

Prerequisite: The following criteria are required: 1) admission to the Cosmetology program, 2) program permit, and 3) concurrent enrollment in COSME 1103, COSME 1105, and COSME 1107; or consent of Program Chair. Reading Placement Test Score - Category 2 is required.

COSME 1103***Chemical Services I***

3 Credit Hours

Introduction to basic cosmetic chemical services including shampoo, scalp treatment, chemical texture, and hair color. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (2 lecture hours, 2 lab hours)

Prerequisite: The following criteria are required: 1) admission to the Cosmetology program, 2) program permit, and 3) concurrent enrollment in COSME 1101, COSME 1105, and COSME 1107; or consent of Program Chair. Reading Placement Test Score - Category 2 is required.

COSME 1105***Hair Styling I***

3 Credit Hours

Introduction to hairstyling and design techniques. Includes basic finger waving, braiding, extensions and hair roller placement. Prepares student for state certification for the Illinois Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) admission to the Cosmetology program, 2) program permit, and 3) concurrent enrollment in COSME 1101, COSME 1103, and COSME 1107; or consent of Program Chair. Reading Placement Test Score - Category 2 is required.

COSME 1107***Thermal Styling I***

3 Credit Hours

Introduction to thermal hair styling using the various thermal implements and techniques. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) admission to the Cosmetology program, 2) program permit, and 3) concurrent enrollment in COSME 1101, COSME 1103, and COSME 1105; or consent of Program Chair. Reading Placement Test Score - Category 2 is required.

COSME 1111***Hair Styling II***

3 Credit Hours

Continued study of hairstyling techniques. Focuses on haircutting techniques using shears and razors. Basic principles of hair roller placement, set, and comb out are also covered. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, and COSME 1107; 3) concurrent enrollment in COSME 1113, COSME 1115, and COSME 1117; or consent of Program Chair.

COSME 1113***Chemical Services II***

3 Credit Hours

Application of chemical texturing, relaxing and permanent waving. Application of hair color and lightening. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, and COSME 1107; 3) concurrent enrollment in COSME 1111, COSME 1115, and COSME 1117; or consent of Program Chair.

COSME 1115***Salon Operations I***

2 Credit Hours

Introduction to salon operations, effective communication, and sanitation management. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 2 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, and COSME 1107; 3) concurrent enrollment in COSME 1111, COSME 1113, and COSME 1117; or consent of Program Chair.

COSME 1117***Esthetics and Nail Technology I***

3 Credit Hours

Introduction to massage movements, facial techniques, hair removal, eyebrow arching, manicuring, and pedicuring. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, and COSME 1107; 3) concurrent enrollment in COSME 1111, COSME 1113, and COSME 1115; or consent of Program Chair.

COSME 1120***License Review I***

2 Credit Hours

Review all first-year curriculum to evaluate readiness for entry into the clinic portion of the cosmetology program. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: COSME 1117 with a grade of C or better, or equivalent.

COSME 1160***Nail Technology Theory I***

3 Credit Hours

Introduction to the nail care profession. Topics include basic training, history of nail care, health and safety, and basic nail care services. Also, examines key components in nail salon industry. (3 lecture hours)

Prerequisite: The following criteria are required: 1) program permit, and 2) concurrent enrollment in COSME 1162; or consent of Program Chair.

Reading Placement Test Score - Category 2 is required.

COSME 1162***Nail Technology Lab I***

3 Credit Hours

Instruction and supervised training in development of basic nail care skills. Topics include manicuring, polish application, massage theory techniques, pedicuring, and introduction to nail enhancements. (6 lab hours)

Prerequisite: The following criteria are required: 1) program permit, and 2) concurrent enrollment in COSME 1160; or consent of Program Chair.

Reading Placement Test Score - Category Two is required.

COSME 1164***Nail Technology Professional Practice***

2 Credit Hours

Nail technology professional best practices including: time management, personal and professional ethics, human resources, and communication skills. (2 lecture hours)

Prerequisite: Reading Placement Test Score-Category Two is required.

COSME 1166***Nail Salon Industry and Operations***

2 Credit Hours

Examines key components of the nail salon industry and operations. Prepares student for state certification for the Nail Technology License from the Illinois Department of Financial and Professional Regulations. (1 lecture hour, 2 lab hours)

Prerequisite: The following criteria are required: 1) program permit, and 2) concurrent enrollment in COSME 1160 and COSME 1162; or consent of Program Chair.

Reading Placement Test Score - Category 2 is required.

COSME 1168***Nail Technology Theory II***

2 Credit Hours

Intermediate analysis of nail technology. Topics include nail industry business practices, nail anatomy and physiology, nail overlays, and nail enhancements. (3 lecture hours)

Prerequisite: The following criteria are required: 1) program permit, 2) grade of C or better in COSME 1160 and COSME 1162, and 3) concurrent enrollment in COSME 1170; or consent of Program Chair.

COSME 1170***Nail Technology Lab II***

3 Credit Hours

Nail technology instruction and supervised training in specialty manicuring, pedicuring, and nail enhancements, including soft and hard gels, monomer liquid and polymer powder, nail resin systems, and electric filing. (6 lab hours)

Prerequisite: The following criteria are required: 1) program permit, 2) grade of C or better in COSME 1160 and COSME 1162, and 3) concurrent enrollment in COSME 1168; or consent of Program Chair.

COSME 1820***Selected Topics***

1-4 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college course schedule. (1 to 4 lecture hours)

COSME 2201***Hair Styling III***

3 Credit Hours

Principles of hair design including fingerwaving, skip waving and sculpture curls. Overview of hair composition, divisions, growth process, and loss. Clipper cutting techniques are also introduced. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) Program permit; 2) grade C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, and COSME 1117; and 3) concurrent enrollment in COSME 2203, COSME 2205, and COSME 2207; or consent of Program Chair.

COSME 2203***Chemical Services III***

3 Credit Hours

Client oriented course in a salon setting. Procedures include application of advanced hair coloring, lightening, and highlighting techniques on clients. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) Program permit; 2) grade C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, and COSME 1117; and 3) concurrent enrollment in COSME 2201, COSME 2205, and COSME 2207; or consent of Program Chair.

COSME 2205***Esthetics and Nail Technology II***

3 Credit Hours

Client oriented course in a salon setting. Procedures include application of manicures, pedicures, facial massage, facial make-up and eyelash enhancement. Nail tips and nail enhancement techniques are also introduced. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) Program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, and COSME 1117; and 3) concurrent enrollment in COSME 2201, COSME 2203, and COSME 2207; or consent of Program Chair.

COSME 2207***Salon Safety and Sanitation***

2 Credit Hours

Client oriented course in a salon setting. Application of safety and decontamination procedures in a salon environment. Students practice methods of managing inventory in the salon dispensary. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 2 lab hours)

Prerequisite: The following criteria are required: 1) Program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, and COSME 1117; and 3) concurrent enrollment in COSME 2201, COSME 2203, and COSME 2205; or consent of Program Chair.

COSME 2221***Hair Styling IV***

3 Credit Hours

Exploration of the various hairstyles, braiding techniques and uses and placement of artificial hair. Students will apply advanced techniques in hair cutting and wet hair styling on salon clients. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, COSME 1117, COSME 2201, COSME 2203, COSME 2205, and COSME 2207 and 3) concurrent enrollment in COSME 2223, COSME 2225, and COSME 2227; or consent of Program Chair.

COSME 2223***Chemical Services IV***

3 Credit Hours

Client oriented course in a salon setting. Advanced procedures in chemical textures and hair removal. The role of chemistry, electricity, and light therapy related to the field of cosmetology. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, COSME 1117, COSME 2201, COSME 2203, COSME 2205, and COSME 2207 and 3) concurrent enrollment in COSME 2221, COSME 2225, and COSME 2227; or consent of Program Chair.

COSME 2225***Salon Operations II***

3 Credit Hours

Client oriented course in a salon setting. Procedures include management of salon routines and operations. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (2 lecture hour, 2 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, COSME 1117, COSME 2201, COSME 2203, COSME 2205, and COSME 2207 and 3) concurrent enrollment in COSME 2221, COSME 2223, and COSME 2227; or consent of Program Chair.

COSME 2227***Thermal Styling II***

2 Credit Hours

Client oriented course in a salon setting. Procedures in application of advanced thermal styling in a salon with clients. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 2 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, COSME 1117, COSME 2201, COSME 2203, COSME 2205, and COSME 2207 and 3) concurrent enrollment in COSME 2221, COSME 2223, and COSME 2225; or consent of Program Chair.

COSME 2250***License Review***

3 Credit Hours

Comprehensive review of cosmetology curriculum and skills in preparation for the Illinois State Board exam to complete the requirements for licensing. (2 lecture hour, 2 lab hours)

Prerequisite: The following criteria are required: 1) program permit; 2) grade of C or better in COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, COSME 1117, COSME 2201, COSME 2203, COSME 2205, COSME 2207, COSME 2221, COSME 2223, COSME 2225, and COSME 2227; or consent of Program Chair.

COSME 2253***Advanced Chemical Services II***

2 Credit Hours

In depth study of the perming and hair color process. Prepares student for state certification for the Cosmetology License from the Department of Professional and Financial Regulations. (1 lecture hour, 4 lab hours)

Prerequisite: COSME 2227 with a grade of C or better, or equivalent and concurrent enrollment is required in COSME 2250 or consent of instructor.

COSME 2260***Wig Production I***

2 Credit Hours

Introduction to wig making techniques including creating and ventilating facial hair, hackling, and lace coloring techniques. (1 lecture hour, 2 lab hours)

Prerequisite: Consent of instructor.

COSME 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

COSME 2862***Internship (Career & Technical Ed)***

2 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour. (10 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

COSME 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

COSME 2872***Cosmetology Practicum***

2 Credit Hours

Capstone course integrating the application of all course work in the cosmetology program. Students work in a cosmetology related business under the supervision of a licensed cosmetologist and faculty advisor. Required seminars provide a forum for discussing issues related to working in the cosmetology industry, guidance in searching for jobs, and developing professional portfolio. (4 lab hours)

Prerequisite: COSME 1101, COSME 1103, COSME 1105, COSME 1107, COSME 1111, COSME 1113, COSME 1115, and COSME 1117, all with a grade of C or better; and permit from department.

Culinary Arts (CULIN)

CULIN 1101***Introduction to Culinary Arts***

3 Credit Hours

Introduction to basic cooking methods. Identification and use of ingredients, handling of tools and equipment and cookery skills and techniques. Preparation of proteins, vegetables, grains, cold food items, stocks and soups. (6 lab hours)

Prerequisite: CULIN 1120 or equivalent or concurrent enrollment in CULIN 1120 or consent of instructor.

CULIN 1102***Regional American Cuisine***

4 Credit Hours

Implementation of fundamental concepts and techniques of food preparation in a restaurant. Students learn stations in a commercial kitchen. Emphasis is on regional cuisine of the United States. (8 lab hours)

Prerequisite: CULIN 1101, or equivalent, or consent of instructor.

CULIN 1103***Fast Casual Dining Operations***

2 Credit Hours

Techniques in a fast casual concept positioned between fast food and casual dining will be explored. Counter service will be emphasized through techniques: merchandising, up selling, and customer service. Focus on front and back of the house positions in a fast casual restaurant. (4 lab hours)

Prerequisite: CULIN 1101 or CULIN 1172 or consent of instructor.

CULIN 1105***Culinary Applications for Specialty Diet***

2 Credit Hours

Cooking methods and techniques to plan and prepare special diets; course inclusive of nutrition, taste, and healthy ingredients, gluten free, vegetarian, and vegan meals. Ingredient substitutions in basic recipes will be prepared. (1 lecture hour, 3 lab hours)

CULIN 1108***Culinary Measurements & Conversions***

2 Credit Hours

Recipe costing and conversions for culinary applications. Yield tests and product assessments will also be covered. (2 lecture hours)

CULIN 1109***Culinary and Baking Nutrition***

1 Credit Hour

Introduction and application of basic nutrition concepts in menu planning. Emphasis is placed on the role of the culinary and baking professional in providing nutritious food. (1 lecture hour)

CULIN 1110***Basic Nutrition***

3 Credit Hours

Emphasis is placed on clinical nutrition, including aspects of diet therapy. The important role nutrition plays in health care is discussed. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CULIN 1120***Sanitation***

1 Credit Hour

Sanitation course provides training in sanitary methods of food handling in the hospitality industry. Prepares students for Illinois Department of Public Health manager certification. (1 lecture hour)

CULIN 1170***Baking Science and Techniques***

2 Credit Hours

Safe operation of baking equipment, proper food handling, identification and scaling units of measure are the focus of this course. Class topics will also include: heat transfer principles, ingredient function, methods, techniques and sensory properties of baked products. (4 lab hours)

Prerequisite: Concurrent enrollment in CULIN 1120 or consent of instructor.

CULIN 1171***Baking Fundamentals***

3 Credit Hours

Baking techniques, terminology, ingredients, weights, measures, and formula conversions. Focus will be on production techniques of breads, laminated doughs, quickbreads, cookies and pies. (6 lab hours)

Prerequisite: Completion of CULIN 1170 or CULIN 1101, or concurrent enrollment in CULIN 1170 or CULIN 1101, or consent of instructor.

CULIN 1172***Pastry Fundamentals***

3 Credit Hours

Focuses on methods and theory necessary for production of cake layers, buttercreams, tart doughs, tart fillings, custards, pate a choux, souffles and piping skills. (6 lab hours)

Prerequisite: CULIN 1171, or equivalent or consent of instructor.

CULIN 1173***Foodtrepreneurship***

2 Credit Hours

Examination of food business fundamentals. Concept identity, site selection, facility design, operations, and merchandising will be discussed. (2 lecture hours)

Prerequisite: CULIN 1172, or concurrent enrollment in CULIN 1172, or consent of instructor.

CULIN 1174***Cake Formula and Decorating Foundations***

3 Credit Hours

Introduces techniques utilized in the production and decoration of classical cakes. Emphasis is placed on the skills required for batter and fillings production, cake assembly, and decorating. (6 lab hours)

Prerequisite: CULIN 1172 or consent of instructor.

CULIN 1175***Specialty Baking***

3 Credit Hours

Introduces specialty baking for dietary restrictions. Emphasis on gluten free, low sugar and restricted diets. Students will bake and examine products specifically designed for dietary restrictions. (6 lab hours)

Prerequisite: CULIN 1171 or equivalent or consent of instructor.

CULIN 1180***Introduction-Culinology and Food Science***

2 Credit Hours

Introduction to the world of Culinology and Food Science for large food production. Emphasis will be placed on the blending of taste and technology, the impact of food and food development processes. (1 lecture hour, 3 lab hours)

CULIN 1185***Elements of Taste and Flavor***

3 Credit Hours

An introduction to the five elements of taste: umami, sweet, salty, sour, and bitter. A variety of herbs, spices, vinegars, oils, and other products will be used in the research and development of recipes. (2 lecture hours, 2 lab hours)

Prerequisite: CULIN 1101 or equivalent and CULIN 1120 or equivalent or consent of instructor.

CULIN 1186***Food Manufacturing and Processing***

2 Credit Hours

The study of ingredients and how they are used in the food manufacturing industry. Safety, sanitation and food preservation methods discussed. (2 lecture hours)

Prerequisite: CULIN 1101 and CULIN 1120 or equivalent or consent of instructor.

CULIN 1190***Food & Wine Passport***

3 Credit Hours

Exploration of traditional foods and beverages as a way to understand a region's importance in collective food history and culture. Through examining consumption, etiquette, agriculture, methods of production, and the evolution of a region's foods and wines, students will gain insight into the historical contributions and global importance of the region. This course is repeatable up to three times for credit. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CULIN 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the catalogue for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70% (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit. (2 to 6 lab hours)

CULIN 1822***Selected Topics***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour, 4 lab hours)

CULIN 1863***French Country Cooking***

3 Credit Hours

Culinary traditions and cultural immersion in the French countryside includes hands-on cooking classes, demonstrations, lectures, and customs. Visits to local markets, villages, artisan producers and restaurants focus on regional cooking styles and heritage of the French table. (2 lecture hours, 2 lab hours)

CULIN 1864***Wine and Gastronomy Tour of France***

3 Credit Hours

Introduce students to the viticulture and gastronomy of France through various learning activities. Visit wine-making facilities and tour historical venues. Emphasis on developing critical guidelines when evaluating, purchasing and storing wines of different regions. Tour markets, medieval villages, confectionery producers, local restaurants and food producers specializing in regional specialties. (2 lecture hours, 2 lab hours)

CULIN 2000***Food Laws and Regulations***

2 Credit Hours

Survey of federal regulations regarding labeling, additives, animal fabrication and preservatives for large food production. Food packaging standards are discussed. (2 lecture hours)

Prerequisite: CULIN 1101 or equivalent and CULIN 1120 or equivalent or consent of instructor.

CULIN 2152***Food, Beverage, and Equipment Purchasing***

2 Credit Hours

Standards of quality as applied to food, beverages, china, glassware, silver, linens, furnishings, equipment, and supplies. Purchase specifications and the derivation of written standards are covered. (2 lecture hours)

CULIN 2153***Garde Manger***

3 Credit Hours

Proper techniques and procedures utilized in pantry and basic garde manger production. Preparation of sausages, salads, sandwiches, appetizers, and pate. Food preservation techniques including cured meats, pickling, brining, and smoking. (6 lab hours)

Prerequisite: CULIN 1101 or equivalent or consent of instructor.

CULIN 2154***Advanced Garde Manger***

2 Credit Hours

Explores commercial meat fabrication, portion control and importance of safe sanitary butchery practice. Topics include terrine, fresh and fermented sausage preparation, and preservation techniques. (4 lab hours)

Prerequisite: CULIN 2153 with a grade of C or better, or equivalent or consent of instructor.

CULIN 2176***Intermediate Baking and Pastry***

4 Credit Hours

Development of skills necessary to produce petit fours, mignardes, bonbon, and candies. Emphasis will be on methods and techniques, chocolate, sugar cookery, finishing decor, buffet conceptualization, and presentation. (8 lab hours)

Prerequisite: CULIN 1172 or equivalent or consent of instructor.

CULIN 2177***Advanced Baking & Pastry Restaurant Production***

4 Credit Hours

Development of skills to produce plated desserts, breads, and mignardes for restaurant production. Emphasis will be on methods and techniques, restaurant service plating, organization, menu development, costing, exploration of fruit and seasonality, flavor pairing, and frozen desserts. (8 lab hours)

Prerequisite: CULIN 2176 with a grade of C or better, or equivalent, or consent of instructor.

CULIN 2178***Artistic Chocolate and Sugar***

3 Credit Hours

This course will introduce techniques utilized in the production of amenity and showpiece construction. Chocolate work, pastillage, blown and pulled sugar will be emphasized. (6 lab hours)

Prerequisite: CULIN 2176 with a grade of C or better, or equivalent or consent of instructor.

CULIN 2179***Artisan Bread and Viennoiserie***

3 Credit Hours

An exploration of the art, craft, and science of artisan breads and viennoiserie. (6 lab hours)

Prerequisite: CULIN 1171 with a grade of C or better, or equivalent or consent of instructor.

CULIN 2180***Cake Decorating Techniques***

2 Credit Hours

Development of techniques utilized in the construction and decoration of cakes. Techniques covered include stacking, sculpting, fondant, gum paste, royal icing, modeling chocolate, and airbrush. (4 lab hours)

Prerequisite: CULIN 1174 or equivalent or consent of instructor.

CULIN 2205***International Cuisine***

3 Credit Hours

Cuisines from around the world are researched, and prepared. Culture, history, and terminology of various international cuisines and their traditional and contemporary cooking techniques are covered. (1 lecture hour, 4 lab hours)

Prerequisite: CULIN 1102 or equivalent or consent of instructor.

CULIN 2206***Asian Cuisine***

3 Credit Hours

Research, planning, and preparation of menus based upon authentic Asian recipes and commercial styles of preparation. Emphasis on developing skills in the use of Asian hand tools and cooking equipment. The cuisines of Canton, Peking, Szechwan, Hunan, and Japan will be studied and prepared. (1 lecture hour, 4 lab hours)

CULIN 2207***Culinary Arts: Mediterranean Cuisine***

3 Credit Hours

Introduction to various cuisines of countries whose continents touch the Mediterranean Sea. Particular emphasis will be placed upon ingredient identification, cooking styles, and preparation techniques. Students will prepare numerous recipes of traditional foods with indigenous ingredients. (6 lab hours)

Prerequisite: CULIN 1120 or concurrent enrollment in CULIN 1120 or consent of instructor.

CULIN 2210***Contemporary a la carte Cuisine***

4 Credit Hours

Advanced culinary techniques including planning, preparation and execution of contemporary menu items. Students will rotate through stations in a traditional a la carte kitchen. (8 lab hours)

Prerequisite: CULIN 1102 with a grade of C or better, or equivalent and CULIN 2153 with a grade of C or better, or equivalent or consent of instructor.

CULIN 2273***Pastry Arts: Baking and Patisserie III***

4 Credit Hours

Advanced study of baking science, terminology, equipment, technology, ingredients, weights and measures, and formula conversions. Concentration on production techniques for advanced pastries, cakes, and tortes. Advanced decorating will also be stressed. (8 lab hours)

Prerequisite: CULIN 1172 or equivalent or consent of instructor.

CULIN 2860**Internship (Career & Technical Ed)**

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CULIN 2863**Internship (Career & Technical Ed)**

3 Credit Hours

Participation in occupational area of study work experience under supervision of both college and employer. Internship/cooperative education learning objectives developed by student and faculty adviser, with approval of employer, to provide appropriate work-based learning experience. Minimum of 75 clock hours per semester credit.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CULIN 2865**Internship Advanced (Career & Tech Ed)**

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Dance (DANCE)

DANCE 1100**Dance Appreciation**

3 Credit Hours

Overview of various aspects of dance as an art form. Emphasis placed on history, dancers, choreographers, movements, styles, and major works of dance. (3 lecture hours)

Course types: Human Relations (A.A., A.S., A.A.S., A.G.S.)

DANCE 1101**Ballet I**

2 Credit Hours

Introduction to the movements and dance skills of classical and contemporary ballet, including ballet positions, barre work, center floor work, and simple dances. (4 lab hours)

DANCE 1102**Ballet II**

2 Credit Hours

Intermediate to advanced work on the movements and dance skills of classical and contemporary ballet. (4 lab hours)

Prerequisite: DANCE 1101 with a grade of C or consent of instructor.

DANCE 1104**Modern Dance I**

2 Credit Hours

Introduction to body awareness and movement in space. Technique, placement, and creative experiences are included in this course.

Concepts of dance composition are studied through improvisation, vocabulary, and spatial awareness. (4 lab hours)

DANCE 1105**Modern Dance II**

2 Credit Hours

Intermediate to advanced work on body awareness and movement in space. Technique, placement, and creative experiences are included in this course. Concepts of dance composition are studied through improvisation, vocabulary, and spatial awareness. (4 lab hours)

Prerequisite: DANCE 1104 with a grade of C or better or equivalent or consent of instructor.

DANCE 1107**Jazz I**

2 Credit Hours

Introduction to the movements and dance skills characteristic of jazz dance. Focus will be placed on isolated body movements, technique work, basic steps, step combinations, and traveling movements across the floor. (4 lab hours)

DANCE 1108**Jazz II**

2 Credit Hours

Creative exploration and performance of intermediate to advanced jazz dance. Focus will be placed on isolated body movements, technique work, intermediate to advanced steps, step combinations, and traveling movements across the floor. (4 lab hours)

Prerequisite: DANCE 1107 with a grade of C or better, or equivalent experience or consent of instructor.

DANCE 1110**Tap I**

2 Credit Hours

Introduction to tap techniques and styles, including rhythm tap and Broadway tap. Emphasis is on fundamental skills and rhythms, time steps, footwork, short combinations, and styling. (4 lab hours)

DANCE 1120***Dance Production and Performance***

1 Credit Hour

Performance and practicum experiences as a dance company in production areas of theater, dance, design technology, and theater management. Students audition, rehearse, and perform dance in a college dance production. This course may be taken three times for credit. (2 lab hours)

Prerequisite: Consent of instructor is required. Must participate in and be evaluated in an open casting placement audition prior to enrolling in the course.

DANCE 1122***Choreography and Composition of Dance***

2 Credit Hours

Introduction to the processes of choreography and composition in dance. Explores methodologies and forms of dance making. (4 lab hours)

DANCE 1123***Choreography and Composition of Dance II***

2 Credit Hours

Intermediate to advanced exploration of compositional tools and methodologies for dance. Creating choreography for proscenium theaters, black box spaces, seating in the round, site specific work, improvisational scores, and film will be explored. (4 lab hours)

Prerequisite: DANCE 1122 with a grade of C or better, or equivalent experience or consent of instructor

DANCE 1130***Dance Pedagogy***

3 Credit Hours

Exploration of the key approaches to teaching dance. Provides practicum experience in the dance teaching process including study of instructional modes, dance learning styles, and factors affecting dance teaching and learning. (6 lab hours)

DANCE 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college course schedule. (1 to 3 lecture hours, 2 to 6 lab hours)

DANCE 2820***Advanced Selected Topics I***

1-6 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college course schedule. (0 to 3 lecture hours, 0 to 6 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

DANCE 2860***Internship in Operation of Dance Studio***

3 Credit Hours

Participation in occupational area of study work experience under supervision of both college and employer. Internship/cooperative education learning objectives developed by student and faculty adviser, with approval of employer, to provide appropriate work-based learning experience. Minimum of 75 clock hours per semester credit, up to three credits. (15 lab hours)

Prerequisite: Consent of Instructor, written permission of the Cooperative Education/Internship program staff and faculty adviser, 2.0 cumulative grade point average, and 12 semester credits of related study.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Dental Hygiene (DEHYG)

DEHYG 1101***Principles in Dental Hygiene I***

3 Credit Hours

Principles of disease transmission. Infection control policies, patient procedures, patient assessment and fundamental instrumentation for the dental hygienist. Foundation of knowledge and strategies of preventive dental hygiene practice. Emphasis on mechanical and chemical plaque control, use of fluoride and health promotion. (3 lecture hours)

Prerequisite: Admission into the Dental Hygiene program or consent of instructor.

DEHYG 1102***Principles in Dental Hygiene II***

2 Credit Hours

Rationale for collection of assessment data and associated clinical procedures. Data collection. Use of instruments, dental sealants, topical fluorides, development of dental hygiene treatment plans. Introduction to direct patient care. (2 lecture hours)

Prerequisite: Admission to the Dental Hygiene program is required. DEHYG 1101 with a grade of C or better or consent of instructor.

DEHYG 1105***Dental Materials/Expanded Functions***

3 Credit Hours

Physical and chemical properties of dental materials, characteristics and manipulation of impression materials, gypsum products, investments, waxes, cements, resins, metallic and non-metallic restorative agents. (2 lecture hours, 3 lab hours)

Prerequisite: Admission to the Dental Hygiene program is required. DEHYG 1101, DEHYG 1115, DEHYG 1120, DEHYG 1125, and DEHYG 1135; all with a grade of C or better or consent of instructor.

DEHYG 1112***Dental Radiology I***

2 Credit Hours

Concepts of radiation history, radiation physics, radiation biology, radiation protection, dental X-ray equipment, film, image characteristics and film processing. Introduction to radiographic examination techniques. (1 lecture hour, 3 lab hours)

Prerequisite: Admission into the Dental Hygiene program or consent of instructor.

DEHYG 1115***Dental Tooth Anatomy and Morphology***

2 Credit Hours

Emphasis on clinical appearance of oral structures, dental terminology, morphology of the permanent and primary dentition, patterns, and the occlusion and malocclusion within and between the dental arches.

Review of dental anomalies and other clinical appearances. (1 lecture hour, 3 lab hours)

Prerequisite: Admission into the Dental Hygiene program or consent of instructor.

DEHYG 1120***Preclinical Dental Hygiene I***

1 Credit Hour

Integration of the scientific and clinical principles underlying the practice of dental hygiene. Clinical procedures and techniques for patient assessment, including: prevention of disease transmission, health history, extra and intraoral examination, gingival evaluation and periodontal examination. Operation of the dental unit and basic instrumentation techniques for the removal of plaque and calculus are presented. (8 clinical hours)

Prerequisite: Admission into the Dental Hygiene program or consent of instructor.

DEHYG 1121***Clinical Dental Hygiene I***

1 Credit Hour

Comprehensive examination procedures, charting and patient treatment. Adjunctive procedures are presented, dental caries preventive agent application and stain removal procedures. Integration of scientific and clinical principles underlying the practice of dental hygiene. Assessing, planning, implementing and evaluating dental hygiene care on patients in the clinical setting. (8 clinical hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 1120 with a grade of C or better or consent of instructor.

DEHYG 1125***Head & Neck Anat: Histology & Embryology***

2 Credit Hours

Organization, structure and function of the head and neck. Focus will be placed on histologic and embryologic development and structural microanatomy to gain an understanding of clinical and oral manifestations of the regions of the head and neck. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene program or consent of instructor.

DEHYG 1135***Applied Nutrition & Biochemistry***

2 Credit Hours

Principles of nutrition and biochemistry applied to dental hygiene patient care. Skills in diet analysis and patient counseling. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene program or consent of instructor.

DEHYG 1136***General and Oral Pathology***

2 Credit Hours

Pathology of the head and neck and oral structures. Specific pathologic processes, repair, healing and regressive changes. Developmental conditions, diseases of bacterial and viral origin, and neoplasms of the oral cavity. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 1101, DEHYG 1115, DEHYG 1120, DEHYG 1125, and DEHYG 1135; all with a grade of C or better or consent of instructor.

DEHYG 1145***Medical Emergencies in a Dental Office***

1 Credit Hour

Familiarity with critical steps in prevention, preparation, early recognition and appropriate management of common medical emergencies in the dental office. (1 lecture hour)

Prerequisite: Admission to the Dental Hygiene program is required. DEHYG 1101, DEHYG 1115, DEHYG 1120, DEHYG 1125, and DEHYG 1135; all with grade of C or better or consent of instructor.

DEHYG 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline, and methods of evaluation in coordination with, and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

DEHYG 2201***Dental Hygiene Theory I***

2 Credit Hours

Application of dental hygiene theory to direct patient care. Techniques and theory related to local anesthesia administration of local anesthetic agents. Emphasis of dental hygiene care of patients with various systemic, mental and physical disorders in the dental office setting. Introduction to use of heavy scaling hand instruments is included. (1 lecture hour, 3 lab hours)

Prerequisite: Admission into Dental Hygiene program is required. DEHYG 1102 with grade of C or better or consent of instructor.

DEHYG 2202***Dental Hygiene Theory II***

2 Credit Hours

Application of dental hygiene theory to direct patient care. Overview of dental hygiene care of patients with various systemic and mental disorders. Presentation of periodontal cases is included. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 2201 with grade of C or better or consent of instructor.

DEHYG 2211***Periodontics I***

2 Credit Hours

Periodontal anatomy. Physiology/etiology of periodontal diseases. Clinical, histopathogenesis of gingivitis/periodontitis. Role of genetics, tobacco use and systemic preventative/therapeutic procedures associated with diagnosis, prognosis, treatment and initial phase of periodontal therapy. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene Program is required. DEHYG 1102, DEHYG 1105, DEHYG 1112, DEHYG 1121, DEHYG 1135, and DEHYG 1145; all with a grade of C or better or consent of instructor.

DEHYG 2212***Periodontics II***

2 Credit Hours

Description of clinical procedures associated with surgical phase of periodontal therapy. Evaluation of periodontal treatment, maintenance phase, and relationship between periodontics and other dental specialties. Discussion of clinical management of the periodontum and adjunctive therapies. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 2211 with a grade of C or better or consent of instructor.

DEHYG 2213***Dental Radiology II***

2 Credit Hours

Advanced dental radiographic and related procedures including exposure and technique errors, occlusal and localization techniques, normal anatomy, panoramic films and radiography, extraoral radiography and digital radiography. Radiography for patients with special needs, introduction to radiographic interpretation: dental caries, periodontal disease, trauma and pulpal and periapical lesions. Introduction to forensic odontology. (1 lecture hour, 3 lab hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 1112 with a grade of C or better or consent of instructor.

DEHYG 2222***Clinical Dental Hygiene II***

1 Credit Hour

Continuation of clinical dental hygiene practice. Includes assessment, planning and implementation of patient care. Adjunctive clinical services include dental sealants, ultrasonic scaling, air polishing, topical fluoride treatments and dental radiographs. (8 clinical hours)

Prerequisite: Admission into the Dental Hygiene Program is required. DEHYG 1121 with a grade of C or better or consent of instructor.

DEHYG 2223***Clinical Dental Hygiene III***

2 Credit Hours

Continuation of clinical dental hygiene practice. Includes assessment, planning and implementation of patient care. Adjunctive clinical services include dental sealants, ultrasonic scaling, air polishing, topical fluoride treatments, amalgam polishing, application of desensitizing agents and dental radiographs. Introduction to outside rotational experiences. (16 clinical hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 2222 with grade of C or better or consent of instructor

DEHYG 2224***Clinical Dental Hygiene IV***

2 Credit Hours

Continuation of clinical dental hygiene practice. Includes assessment, planning and implementation of patient care. Adjunctive clinical services include dental sealants, ultrasonic scaling, air polishing, topical fluoride treatments, amalgam polishing, application of desensitizing agents and dental radiographs. Administration of topical and local anesthetic agents. (16 clinical hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 2223 with grade of C or better or consent of instructor.

DEHYG 2225***Review of Dental Literature***

1 Credit Hour

Review and evaluation of dental literature for the contemporary dental hygienist. Focus on research methodologies and statistical analysis as it applies to dentistry. (1 lecture hour)

Prerequisite: Admission into the Dental Hygiene Program is required or consent of instructor.

DEHYG 2232***Community Dental Health I***

2 Credit Hours

Dental hygienist's role in community. Epidemiological concepts, trends in oral diseases, research assessment tools, and strategies to improve public access to oral health care. Review of biostatistics, federal and state agencies, and managed care. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 2225 with grade of C or better or consent of instructor.

DEHYG 2233***Community Dental Health II***

2 Credit Hours

Creation, implementation, and evaluation of a dental health care program in the community. Presentation of projects to faculty and peers. (6 lab hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 2232 or grade of C or better or consent of instructor.

DEHYG 2235***Dental Pharmacology & Local Anesthetics***

2 Credit Hours

Classifications and varieties of drugs, pharmacologic effects, adverse reactions, usual indications and contraindications. Discussion of drugs utilized to treat common diseases. Pharmacokinetics of local and general anesthetic agents, and their use. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 1115, DEHYG 1125, DEHYG 1135, DEHYG 1136, DEHYG 2211, and DEHYG 2222; all with a grade of C or better or consent of instructor.

DEHYG 2245***Ethics and Jurisprudence: Practice Manag***

2 Credit Hours

Preparation for professional role as health care provider and member of dental health team. Focus on ethical and legal responsibilities, dental practice act, malpractice issues, and scope of dental hygiene practice. (2 lecture hours)

Prerequisite: Admission into the Dental Hygiene program is required. DEHYG 2201 with a grade of C or better and DEHYG 2222 with a grade of C or better or consent of instructor.

DEHYG 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

DEHYG 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Diagnostic Medical Imaging Nuclear Medicine (DMIN)

DMIN 1100

Basics of Nuclear Medicine

3 Credit Hours

History and evolution of Nuclear Medicine as an imaging modality. Radionuclide identification, radionuclide energies and half-lives, and commonly used radiopharmaceuticals for Diagnostic Nuclear Medicine procedures. Introduction to Diagnostic Nuclear Medicine procedures. Patient handling techniques and nursing and laboratory procedures relating to Nuclear Medicine. Introduction to professional medical ethics, legal issues and patient rights. Quality assurance procedures for the radiation protection of Nuclear Medicine personnel. (3 lecture hours)

Prerequisite: Admission to the Nuclear Medicine Technology program or consent of instructor.

DMIN 1101

Physics & Instrumentation Nuclear Medicine

6 Credit Hours

Principles of atomic structure, nomenclature and radiation. Introduction to radionuclides, physics of radiation (particulate and non-particulate), natural and artificial radiation, calculations of radioactive decay, exponential equations, calculation of radiation dosimetry, half-life equations, radionuclide production, radiopharmaceutical dose determinations, radiation interactions with matter, radiation protection and safety methodology, radiation shielding formulation and counting statistics. Basic aspects in imaging and non-imaging radiation detection instrumentation including: scintillation detectors, planar, SPECT (single photon emission computerized tomography), PET (positron emission tomography), multichannel analyzers, quality assurance testing for Nuclear Medicine instrumentation including G-M detectors, ionization chambers and scintillation detectors. (4 lecture hours, 4 lab hours)

Prerequisite: Admission to the Nuclear Medicine Technology program or consent of instructor.

DMIN 1102

Nuclear Medicine Radiopharmacy

6 Credit Hours

Nuclear Medicine radiopharmacy including: production of radionuclides, radiopharmaceutical chemistry, radiopharmaceuticals and methods of radiolabeling, characteristics of specific radiopharmaceuticals, biorouting and physiological mechanisms of tracer uptake, pharmacokinetics, radiation units, specific activity, concentration determination, dose calculations, methods of dispensing, quality assurance of radiopharmaceuticals, and universal precautions. Specialized clinical radiopharmaceuticals include: monoclonal antibodies, peptides, receptors, Positron Emission Tomography, therapy, and current research. Radiopharmacy design, management and record keeping, radiation safety and Nuclear Regulatory Commission (NRC) and Illinois Emergency Management Agency (IEMA) radiopharmacy rules and regulations. (4 lecture hours, 4 lab hours)

Prerequisite: Admission to Nuclear Medicine Technology program and DMIN 1100, DMIN 1101, and DMIN 1111 or equivalent or consent of instructor.

DMIN 1103

Radiation Biology & Safety Bridge

2 Credit Hours

Topics in radiation biology will include qualitative and quantitative effects on the human body following exposure to various types of ionizing radiation, and the potential harmful effects and the benefits of the medical uses of radiation. Procedures for personnel and environmental monitoring, emergency management, decontamination, and proper methods of receiving, storing and disposing of radioactive materials. Basic concepts of radiation exposure reduction. Concepts of radiation safety for personnel, patients and the environment. (2 lecture hours, 1 lab hour)

Prerequisite: Admission to Nuclear Medicine Technology program or consent of instructor.

DMIN 1111

Clinical Nuclear Medicine I

3 Credit Hours

First in a three-course sequence of supervised clinical instruction in Nuclear Medicine Technology. Comprehensive study of imaging and non-imaging techniques, instrumentation quality control, patient care, radiopharmacy, computer analysis and quality assurance. Students are expected to demonstrate competency according to defined objectives at prospective clinical affiliates. (24 clinical hours)

Prerequisite: Admission to the Nuclear Medicine Technology program or consent of instructor.

DMIN 1840

Independent Study

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Admission to the Nuclear Medicine Technology program and consent of instructor is required.

DMIN 2200

Nuclear Medicine Procedures II

4 Credit Hours

Applied anatomy and physiology of cardiovascular, skeletal, genitourinary, gastrointestinal, respiratory and endocrine systems. Diagnostic imaging techniques, radiopharmaceutical agents, indications and limitations of nuclear medicine procedures, normal and abnormal pathology, dosimetry. Computer acquisition and processing techniques. Case study critiques, journal review and case study presentations. (3 lecture hours, 2 lab hours)

Prerequisite: Admission to the Nuclear Medicine Technology program and DMIN 1100 and DMIN 1103 or consent of instructor. Admission to program is required.

DMIN 2202***Nuclear Medicine Procedures III***

4 Credit Hours

Applied anatomy and physiology of the central nervous, immune, lymphatic, hematopoietic, exocrine, gastrointestinal systems. Non-imaging tests including Schilling's, Helibacter pylori and blood volume determination. Advanced topics in nuclear cardiology, tumor imaging, neurology, radioimmunoimaging, radioimmunotherapy and miscellaneous procedures. Diagnostic imaging techniques, radiopharmaceutical agents, indications and limitations of nuclear medicine procedures, normal and abnormal pathology, dosimetry. Computer acquisition and processing techniques. Case study critiques, journal review and case study presentations. (3 lecture hours, 2 lab hours)

Prerequisite: Admission to the Nuclear Medicine Technology program and DMIN 2200 or consent of instructor.

DMIN 2211***Clinical Nuclear Medicine II***

3 Credit Hours

Second in a three-course sequence of supervised clinical instruction in Nuclear Medicine Technology. Comprehensive study of imaging and non-imaging techniques, instrumentation quality control, patient care, radiopharmacy, computer analysis and quality assurance. Students are expected to demonstrate competency according to defined objectives at prospective clinical affiliates. (24 clinical hours)

Prerequisite: Admission to the Nuclear Medicine Technology program and DMIN 1111 or consent of instructor.

DMIN 2212***Clinical Nuclear Medicine III***

3 Credit Hours

Third in a three-course sequence of supervised clinical instruction in Nuclear Medicine Technology. Comprehensive study of imaging and non-imaging techniques, instrumentation quality control, patient care, radiopharmacy, computer analysis and quality assurance. Students are expected to demonstrate competency according to defined objectives at prospective clinical affiliates. (24 clinical hours)

Prerequisite: Admission to the Nuclear Medicine Technology program and DMIN 2211 or consent of instructor.

DMIN 2221***PET/CT***

3 Credit Hours

Physics, instrumentation and radiochemistry of PET (Positron Emission Tomography). Quality assurance of the PET and PET-CT (computerized tomography) instrumentation. Physiological, biochemical and pharmacological mechanisms of PET radiopharmaceuticals. Radiation safety and protection. Clinical PET imaging in neurological, cardiovascular, oncological and psychiatric disorders. Image reconstruction and display protocols. Case study presentations and journal review. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to the Nuclear Medicine Technology program and DMIN 2202 and DMIN 2211 or consent of instructor.

DMIN 2222***Nuclear Medicine Review Seminar***

1 Credit Hour

Prepares students for the Nuclear Medicine Technology Certification Board Examination (NMTCB). Test taking tips and practice exams. Practical application of patient care, human anatomy and physiology, pathology, radiation biology, radiation protection, physics, instrumentation, radiopharmacy, in vivo and in vitro procedures, Diagnostic and Therapeutic Nuclear Medicine procedures, Positron Emission Tomography. Students will complete a registry review project and a mock registry. (1 lecture hour)

Prerequisite: Admission to the Nuclear Medicine Technology program and DMIN 2202 and DMIN 2211 or consent of instructor.

DMIN 2500***Sectional Anatomy and Pathology for Ct***

3 Credit Hours

Students will be provided with a review of anatomy and pathology in Computed Tomography (CT) imaging planes. The characteristic appearance of each anatomical structure as it appears on CT images with pathologic and trauma processes is also covered. (3 lecture hours)

Prerequisite: Admission to the Computed Tomography Program is required or consent of instructor.

DMIN 2501***CT Principles & Patient Care***

3 Credit Hours

Students are introduced to principles, procedures, and patient care specific to Computed Tomography (CT). Pediatric patient care and routine and emergency procedures are described. CT images are reviewed for quality, positioning, and illustration of anatomy. (3 lecture hours)

Prerequisite: Admission to the Computed Tomography Program is required or consent of instructor.

DMIN 2502***Physics and Instrumentation for Ct***

3 Credit Hours

Students are provided with the physics and instrumentation principles specific to Computed Tomography (CT). CT image processing and display methods as well as patient factors affecting image quality are identified. (2 lecture hours, 2 lab hours)

Prerequisite: DMIN 2500 with a grade of C or better, or equivalent and DMIN 2501 with a grade of C or better, or equivalent. Admission to the Computed Tomography Program is required or consent of instructor.

DMIN 2503***Radiation Safety/Quality Mgmt. for CT***

3 Credit Hours

Students will be introduced to necessary principles of radiation safety and quality management specific to Computed Tomography (CT). Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies, and health care organizations are described. (2 lecture hours, 2 lab hours)

Prerequisite: DMIN 2500 with a grade of C or better, or equivalent and DMIN 2501 with a grade of C or better, or equivalent.

DMIN 2511***Clinical Applications of CT I***

3 Credit Hours

Students attend clinical rotations to connect theory with practice and performance of Computed Tomography (CT) procedures emphasizing proper patient care. (6 lab hours)

Prerequisite: Admission to the Computed Tomography Program is required or consent of instructor.

DMIN 2512***Clinical Applications of CT II***

3 Credit Hours

Students complete clinical applications connecting theory with practice through the performance of advanced CT procedures. (6 lab hours)

Prerequisite: DMIN 2511 with a grade of C or better, or equivalent.

DMIN 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

DMIN 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Diagnostic Medical Imaging Radiography (DMIR)

DMIR 1100***Introduction to DMIR***

2 Credit Hours

An introduction and overview of the field of radiography and radiation safety. This course requires a service learning component. (2 lecture hours)

DMIR 1111***Clinical Education I***

1 Credit Hour

Applied radiography at assigned clinical education setting. Satisfies the clinical objectives and competency requirements listed in the Radiography program design for the first semester. (8 clinical hours)

Prerequisite: Admission to Diagnostic Medical Imaging Radiography program is required.

DMIR 1112***Clinical Education II***

2 Credit Hours

Applied radiography at assigned clinical education centers. Satisfies the clinical objectives and competency requirements as specified in the Radiologic program design for the second semester. (16 clinical hours)

Prerequisite: DMIR 1111 and DMIR 1131, both with grade of C or better, or equivalent or consent of instructor.

DMIR 1113***Clinical Education III***

2 Credit Hours

Applied radiography at assigned clinical education centers. Satisfies the clinical objectives and competency requirements as specified in the Radiography program design. (16 clinical hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Radiography program is required. DMIR 1112, DMIR 1121, and DMIR 1132; all with a grade of C or better, or equivalent or consent of instructor.

DMIR 1121***Radiographic Equipment***

4 Credit Hours

Elementary physical principles including systems of measurement, classical mechanics, structure of matter, electricity and magnetism, X-ray production, X-ray circuits, and radiographic and fluoroscopic systems. (4 lecture hours)

Prerequisite: DMIR 1111 and DMIR 1131, both with a grade of C or better, or equivalent or consent of instructor.

DMIR 1122***Image Formation and Evaluation***

5 Credit Hours

Students will be introduced to advanced principles and applications of radiographic equipment. Topics will include radiographic image production, image quality, image processing, image receptors, digital image display and storage, and production and control of scattered radiation. This courses may be repeated one time with approval of DMIR faculty. (4 lecture hours, 2 lab hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Radiography program is required. DMIR 1112, DMIR 1121, and DMIR 1132, all with a grade of C or better, or equivalent or consent of instructor.

DMIR 1131***Radiographic Procedures I***

4 Credit Hours

Radiographic patient care, terminology, routine radiographic positioning and radiographic image evaluation of the thorax, abdomen and urinary tract. (3 lecture hours, 2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Radiography Program or consent of instructor.

DMIR 1132***Radiographic Procedures II***

3 Credit Hours

Routine radiographic positioning and radiographic image evaluation of the upper and lower extremities, bony thorax, and digestive system. (2 lecture hours, 2 lab hours)

Prerequisite: DMIR 1111 and DMIR 1131, both with a grade of C or better, or equivalent or consent of instructor.

DMIR 1133***Radiographic Procedures III***

3 Credit Hours

Routine and special projections/methods of radiographic positioning and radiographic image evaluation of the head and neck, spine and pelvis. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Radiography program is required. DMIR 1112, DMIR 1121, and DMIR 1132; all with a grade of C or better, or equivalent or consent of instructor.

DMIR 1145***Ethics, Law & Basic Pharmacology***

1 Credit Hour

Provides the fundamentals in medical ethics, law, and pharmacology in Radiography. (1 lecture hour)

Prerequisite: DMIR 1113, DMIR 1122, and DMIR 1133, all with a grade of C or better or equivalent or consent of instructor.

DMIR 2201***Radiation Physics, Biology & Protection***

3 Credit Hours

Students will learn advanced radiological physics related to biological effects of ionizing radiation as well as principles in personal and patient radiation safety and protection. (3 lecture hours)

Prerequisite: DMIR 1145 and DMIR 2211, both with a grade of C or better or consent of instructor.

DMIR 2211***Clinical Education IV***

1 Credit Hour

Students perform radiography skills at assigned clinical education centers satisfying the Radiography program's clinical objectives and competency requirements. (8 clinical hours)

Prerequisite: Admission to Diagnostic Medical Imaging Radiography program and DMIR 1113, DMIR 1122, and DMIR 1133, all with a grade of C or better, or equivalent, or consent of instructor.

DMIR 2212***Clinical Education V***

3 Credit Hours

Students will apply acquired skills in radiography at assigned clinical education centers. Students must satisfy the clinical objectives and competency requirements as specified in the Radiography program design. (24 clinical hours)

Prerequisite: DMIR 1145 and DMIR 2211, both with a grade of C or better or consent of instructor.

DMIR 2213***Clinical Education VI***

3 Credit Hours

Applied radiography at assigned clinical education centers. Satisfies the clinical objectives and competency requirements as specified in the Radiography program design. (24 clinical hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Radiography program is required. DMIR 2201, DMIR 2212, and DMIR 2225, all with a grade of C or better or consent of instructor.

DMIR 2220***Sectional Anatomy for Diagnostic Imaging***

2 Credit Hours

Study of human anatomy as demonstrated in sectional planes seen in Computed Tomography (CT), Positron Emission Tomography (PET) and Magnetic Resonance Imaging (MRI). Comparison of planar anatomy to sectional anatomy through the use of diagrams and radiologic images. Emphasis is on anatomy of the head, neck, spine, thorax, abdomen, pelvis, and musculoskeletal system. (2 lecture hours)

Prerequisite: American Registry of Radiologic Technologists Certification and/or Nuclear Medicine Certification or consent of instructor.

DMIR 2225***Basic Pathophysiology***

3 Credit Hours

Students will learn basic concepts of pathology and the causes of disease in the body systems as illustrated by various diagnostic medical imaging disciplines. (3 lecture hours)

Prerequisite: DMIR 1145 and DMIR 2211, both with a grade of C or better or consent of instructor.

DMIR 2235***Quality Management in Diagnostic Imaging***

2 Credit Hours

Students will explore advanced technical aspects of quality assurance and quality management as related to analog film processing, digital image processing as well as radiographic equipment. Focus will be on practical applications in the radiology department. (1 lecture hour, 2 lab hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Radiography program is required. DMIR 2201, DMIR 2212, and DMIR 2225, all with a grade of C or better or equivalent, or consent of instructor.

DMIR 2240***Radiographic Image Analysis***

3 Credit Hours

Students will learn a systematic approach for evaluating radiographic images to determine diagnostic quality. Topics will include a review and correlation of previous subjects. (3 lecture hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Radiography program is required. DMIR 2201, DMIR 2212, and DMIR 2225, all with a grade of C or better or equivalent, or consent of instructor.

DMIR 2400***Clinical Applications of Mammography***

2 Credit Hours

Experience in the performance of mammography exams, including patient preparation and education, interventional procedures and the required quality control tests described by the American College of Radiology (ACR) Mammography Quality Control Manual. Designed to meet or exceed the minimum competency requirements for certification by the American Registry of Radiologic Technologists (ARRT). (16 clinical hours)

Prerequisite: Admission to Diagnostic Medical Imaging Radiography program and ARRT certification or consent of instructor.

DMIR 2402***Breast Anatomy, Physiology and Pathology***

1 Credit Hour

Establishment of baseline knowledge in breast anatomy and physiology. Correlation between breast anatomic structures and mammographic anatomic structures. Introduction to breast viability, benign and cancerous pathology, and mammographic appearance. (1 lecture hour)

Prerequisite: Admission to Diagnostic Medical Imaging Radiography program or consent of instructor.

DMIR 2403***Mammography Principles and Procedures***

2 Credit Hours

Introduction to technologist-performed physical breast assessment. Preliminary patient assessment, physical breast assessment, and documentation of findings required for a comprehensive examination for imaging correlation of the breasts. A knowledge base of the various positions and projections in mammography along with the clinical data needed to perform the exam and positioning techniques for both screening and diagnostic mammography, including interventional procedures. (1 lecture hour, 2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Radiography program or consent of instructor.

DMIR 2404***Mammography Quality Mgmt & Instrumentation***

2 Credit Hours

Introduction to mammography equipment along with mandated requirements governing use and factors that influence the production and recording of mammographic images. Accreditation and service delivery standards included. (2 lecture hours)

Prerequisite: Admission to Diagnostic Medical Imaging Radiography program or consent of instructor.

Diagnostic Medical Imaging Sonography (DMIS)

DMIS 1100***Intro to Diagnostic Medical Sonography***

3 Credit Hours

History of ultrasound including medical applications. Description of the roles, responsibilities and rules of the diagnostic medical sonographer. Introduction to the fundamental principles of the use and maintenance of ultrasound equipment. Indications of diagnostic sonography procedures, positioning, safety and image processing. Legal and ethical issues in an ultrasound department. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Sonography program or consent of instructor.

DMIS 1101***Sonographic Physics & Instrumentation I***

3 Credit Hours

Introduction to physics of acoustics and sonographic instrumentation. Production and types of sound waves discussed. Demonstration of propagation of ultrasound through tissues, transducers, pulse-echo instruments and display methods. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Sonography program or consent of instructor.

DMIS 1102***Sonographic Physics & Instrumentation II***

3 Credit Hours

Continuation of pulse-echo instrumentation including harmonics, image artifacts and color flow imaging with Doppler instrumentation. Bioeffects and safety in ultrasound imaging. Quality management applied to Sonography. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program, DMIS 1100, and DMIS 1101, or consent of instructor.

DMIS 1105***Intro to Pathophysiology for Sonographer***

2 Credit Hours

Student will be introduced to physiological processes associated with disease and/or injury in the body systems. Pathology cases are illustrated with review of diagnostic medical imaging studies including Sonography, Computed Tomography, Magnetic Resonance Imaging, Radiography, and Nuclear Medicine. (2 lecture hours)

Prerequisite: HLTHS 1110 with a grade of B or better, or equivalent, and ANAT 1552 or ANAT 1572 with a grade of B or better, or equivalent or consent of instructor.

DMIS 1110***Patient Care Skills for Sonographers***

2 Credit Hours

Students will be introduced to patient care skills applied to the role of a Sonographer in an imaging department. Topics will include patient care skills, scanning ergonomics, patient confidentiality, and communication skills with hospital personnel as applied to all areas of sonography. (1 lecture hour, 2 lab hours)

Prerequisite: HLTHS 1110 with a grade of B or better, or equivalent or concurrent enrollment in HLTHS 1110; and ANAT 1552 with a grade of B or better, or equivalent or concurrent enrollment in ANAT 1552, or ANAT 1572 with a grade of B or better, or equivalent or concurrent enrollment in ANAT 1572.

DMIS 1112***Clinical Education II***

3 Credit Hours

Students will participate in a clinical experience in Sonography at a health care institution. Students will apply concepts and skills learned in DMIS courses at the health care institution. (24 clinical hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program is required. DMIS 1100, DMIS 1101, and DMIS 1120, all with a grade of C or better, or equivalent. Clinical Education Sonography courses from other colleges under approved cooperative agreements.

DMIS 1113***Clinical Education III***

2 Credit Hours

Students will continue Sonography clinical experience in a health care institution. Students will continue applying concepts and skills learned in DMIS courses at the health care institution. (16 clinical hours)

Prerequisite: Admission to program is required and DMIS 1102, DMIS 1112, DMIS 1121, and DMIS 1131 or consent of instructor or Clinical Education Sonography courses from other colleges under approved cooperative agreements.

DMIS 1114***Clinical Education IV***

3 Credit Hours

Students will continue Sonography clinical experience in a health care institution. Students will continue applying concepts and skills learned in DMIS courses at the health care institution. (24 clinical hours)

Prerequisite: Admission to the program is required and DMIS 1113, with a grade of C or better, or equivalent or Clinical Education Sonography courses from other colleges under approved cooperative agreements.

DMIS 1120***Sonographic Cross-Sectional Anatomy***

3 Credit Hours

Introduction to the basics of cross-sectional anatomy as interpreted on diagnostic sonographic images. Sectional human anatomy in the transverse, sagittal and coronal planes. Correlation of anatomy with cadavers and ultrasound images. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to the Diagnostic Medical Imaging Sonography program or consent of instructor.

DMIS 1121***Fundamentals of OB/GYN I***

3 Credit Hours

Students will be introduced to the female reproductive system as it relates to Sonography. Topics will include imaging in the first trimester of pregnancy and non-gravid uterus, review of ultrasound images of normal anatomy and pathology, ultrasound appearance of the cervix, uterus, fallopian tubes, ovaries, placenta, and fetus. Management of gynecologic infertility and post menopausal women will also be discussed. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to program is required or consent of instructor.

DMIS 1122***Fundamentals of OB/GYN II***

3 Credit Hours

Students will be introduced to fetal ultrasound techniques in the second and third trimester. Topics will include multiple gestation pregnancies, antenatal syndromes, congenital fetal disorders, placenta, umbilical cord, and membrane conditions. Fetal growth assessment and management of growth disorders will also be discussed. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to program is required and DMIS 1121 with a grade of C or better, or equivalent or consent of instructor.

DMIS 1131***Abdomen/Superficial Structures I***

3 Credit Hours

Students will be introduced to abdominal cross-sectional anatomy with the use of ultrasound. Topics will include vascular and abdominal organ systems with normal and pathologic conditions. Ultrasound evaluations will include upper abdominal organs such as liver, and gallbladder and biliary tree, spleen, pancreas, great vessels, scrotum, prostate, and urinary tract. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to program is required and DMIS 1100, DMIS 1101, and DMIS 1120, all with a grade of C or better, or equivalent.

DMIS 1132***Abdomen/Superficial Structures II***

2 Credit Hours

Continuation of anatomy and pathology of the abdominal and superficial structures in ultrasound imaging. Areas include: thyroid, parathyroid, breast, neck, thorax, gastrointestinal tract, musculoskeletal system, extracranial vessels and neonatal brain. Introduction of color flow Doppler techniques. (2 lecture hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and DMIS 1121, DMIS 1131, and DMIS 1141 or consent of instructor.

DMIS 1140***Fundamentals of Breast Sonography***

2 Credit Hours

Students will be introduced to the fundamentals of breast Sonography. This course reviews the identification of sonographic physics-related artifacts in normal and abnormal breast tissue and anatomy. Correlation with other imaging modalities and surgical techniques in breast pathology are also included. (2 lecture hours)

Prerequisite: Admission to program is required. DMIS 1102 with a grade of C or better, or equivalent or Registered Diagnostic Medical Sonographer (ARDMS) or Registered Sonographer in ARDMS or ARRT.

DMIS 1141***Case Study Critique I***

1 Credit Hour

Students will present diagnostic medical ultrasound cases of normal and abnormal anatomy. Students will discuss imaging techniques and image quality of cases presented. (1 lecture hour)

Prerequisite: Admission to program is required and DMIS 1100 and DMIS 1101, both with a grade of C or better, or equivalent or consent of instructor.

DMIS 1142***Case Study Critique II***

1 Credit Hour

Students will present advanced diagnostic medical ultrasound cases of normal and abnormal anatomy. Students will discuss imaging techniques and image quality of cases presented. (1 lecture hour)

Prerequisite: Admission to program is required and DMIS 1131, DMIS 1132, and DMIS 1141, all with a grade of C or better, or equivalent or consent of instructor.

DMIS 1151***Hands-On Scanning Lab 1***

1 Credit Hour

Overview and emphasis of principles taught in DMIS-1100 in Abdominal/Superficial Structures and Obstetrics/Gynecology. Students perform hands-on scanning techniques in the scanning lab. Various scanning techniques are demonstrated on fellow students under the guidance of the instructor. Proper techniques in manipulating the transducer probe are demonstrated. Identification of organ systems and corresponding ultrasound images. (2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography Program or consent of instructor.

DMIS 1152***Hands-On Scanning Lab 2***

1 Credit Hour

Course will expand on principles of Abdominal/Superficial Structures and Obstetrics/Gynecology. Students will perform advanced hands-on scanning techniques utilizing proper manipulation of transducer probes. (2 lab hours)

Prerequisite: Admission to program is required. Concurrent enrollment is required in DMIS 1151 or consent of instructor.

DMIS 1153***Hands-On Scanning Lab 3***

1 Credit Hour

Continuation of principles taught in Diagnostic Medical Imaging Sonography 1152 in Abdominal/Superficial Structures and Obstetrics/Gynecology. Emphasis placed on advanced skills in obstetrical scanning. Students perform hands-on scanning techniques on volunteer patients under the guidance of the instructor. Proper techniques in manipulating the transducer probe are demonstrated. Identification of organ systems and corresponding ultrasound images. (2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and DMIS 1152 or consent of instructor.

DMIS 1154***Hands-On Scanning Lab 4***

1 Credit Hour

The course will expand on principles of Abdominal and Superficial Structures and Obstetrics and Gynecology. Students will perform advanced hands-on scanning techniques utilizing proper manipulation of transducer probes. Emphasis will be placed on students demonstrating their scanning skills on patient volunteers. (2 lab hours)

Prerequisite: Admission to the program is required. DMIS 1153 with a grade of C or better, or equivalent or consent of instructor.

DMIS 1160***Legal Issues of Health Care-Sonography***

1 Credit Hour

Students will be introduced to the legal system as it applies to the medical field. Medical malpractice cases will be reviewed and discussed. Students will be taught how to protect themselves from becoming involved in a medical malpractice case. (1 lecture hours)

Prerequisite: Admission to the program is required. DMIS 1121 and DMIS 1131, both with a grade of C or better, or equivalent or consent of instructor.

DMIS 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Currently enrolled in the Diagnostic Medical Imaging Sonography Program or consent of instructor.

DMIS 1822***Selected Topics III***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour, 2 to 4 lab hours)

Prerequisite: Currently enrolled in the Diagnostic Medical Imaging Sonography Program or consent of instructor.

DMIS 1823***Selected Topics IV***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 to 6 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program or consent of instructor.

DMIS 1824***Selected Topics V***

1-2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 2 lecture hours)

Prerequisite: Currently enrolled in the Diagnostic Medical Imaging Sonography program or consent of instructor.

DMIS 1826***Selected Topics VII***

1 Credit Hour

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in the college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lab hours)

Prerequisite: Currently enrolled in the Diagnostic Medical Imaging Sonography program or consent of instructor.

DMIS 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

DMIS 2200***Vascular Hemodynamics and Physics***

2 Credit Hours

A review of the circulatory system blood as fluid, and how blood circulates. A description of the various forms of energy and how they affect blood movement will be covered. The principles of blood movement, conduits and circulation will be examined along with laboratory demonstration of these principles. The Doppler effect and the Doppler will be explained and applied. Various Doppler Instruments used to assess blood flow in vascular ultrasound will be reviewed and utilized in class and lab. (1 lecture hour, 2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program is required.

DMIS 2201***Abdominal and Peripheral Arterial***

3 Credit Hours

Evaluation of blood vessels, their purpose and composition, detailed physiology of the arterial blood flow system and ultrasound testing with direct and indirect methods. Arterial anatomy of the abdomen, pelvic, and upper extremities as well as the lower extremities will be reviewed. Diseases of the arterial system and their effects will be addressed with indications for ultrasound arterial examinations and treatments. (3 lecture hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and concurrent enrollment required in DMIS 2221 or consent of instructor.

DMIS 2203***Cerebrovascular Ultrasound***

2 Credit Hours

Overview of the purpose and composition of blood vessels and the physiology of the cerebrovascular system. Cerebrovascular anatomy are reviewed. Disease of the cerebrovascular system are addressed with the indications for ultrasound cerebrovascular examinations. A review and demonstration of cerebrovascular ultrasound testing and findings and other laboratory modalities. Treatments for various diseases of the cerebrovascular system are addressed. Cerebrovascular testing as a part of ongoing, post-intervention patent management are included. (2 lecture hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and concurrent enrollment required in DMIS 2223 or consent of instructor.

DMIS 2204***Abdominal and Peripheral Venous***

2 Credit Hours

Overview of the purpose and composition of blood vessels and the physiology of the venous blood flow system. Venous anatomies of the abdomen, pelvis, upper extremities, as well as the lower extremities are addressed. Diseases of the venous system, their effects and indications for ultrasound venous examinations are included. An overview of the abdominal and peripheral venous ultrasound testing, their findings and other laboratory modalities. Treatments for various diseases of abdominal and peripheral venous systems are reviewed. (2 lecture hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and concurrent enrollment required in DMIS 2224 or consent of instructor.

DMIS 2212***Clinical Education - Vascular Imaging 1***

3 Credit Hours

Students will participate in a clinical experience in vascular sonography at a health care institution. Students will apply concepts and skills learned in DMIS vascular courses at the health care institution. (24 clinical hours)

Prerequisite: Admission to the program is required. Clinical Education Vascular Sonography courses from other colleges under approved cooperative agreements.

DMIS 2213***Clinical Education - Vascular Imaging 2***

2 Credit Hours

Students will continue vascular sonography clinical experience in a health care institution. Students will continue applying concepts and skills learned in DMIS vascular courses at the health care institution. (16 clinical hours)

Prerequisite: Admission to the program is required and DMIS 2212 with a grade of C or better, or equivalent or Clinical Education Vascular Sonography courses from other colleges under approved cooperative agreements.

DMIS 2221***Abdominal & Peripheral Arterial Hands-On***

1 Credit Hour

An overview of abdominal and peripheral arterial ultrasound testing that offers hands-on training in the classroom with vascular ultrasound equipment. Application of principles taught in DMIS-2201. Various arterial testing techniques and scanning are demonstrated and performed on fellow students under the guidance of the instructor. Proper techniques in these testing modalities are reviewed along with proper identification of the arterial system. (2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and concurrent enrollment in DMIS 2201.

DMIS 2223***Cerebrovascular Ultrasound Hands-On Scan***

1 Credit Hour

Continuation of DMIS 2203 that provides a further understanding of cerebrovascular ultrasound testing by offering hands-on training in the classroom with vascular ultrasound equipment. Various cerebrovascular testing techniques and scanning are demonstrated to the students. Under the guidance of the instructor, students will practice these techniques on fellow students. Proper techniques in these testing modalities will be reviewed along with proper identification of the cerebrovascular system. (2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and concurrent enrollment required in DMIS 2203.

DMIS 2224***Abdominal & Peripheral Venous Hands-On***

1 Credit Hour

Continuation of DMIS 2204 that provides an understanding of abdominal and peripheral venous ultrasound testing by offering hands-on training in the classroom with vascular ultrasound equipment. Various venous testing techniques and scanning are demonstrated to the students. Under the guidance of the instructor the students will practice these techniques on fellow students. Proper techniques in these testing modalities are reviewed along with proper identification of the venous system. (2 lab hours)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and concurrent enrollment required in DMIS 2204.

DMIS 2280***Sonographic Physics Registry and Review***

1 Credit Hour

Intensive review of topics taught in DMIS 1101 and DMIS 1102. Preparation for taking the American Registry of Diagnostic Medical Sonography certificate examination. Review of physical principles of sound and sonographic instrumentation. Principles of propagation of ultrasound through tissues, transducers, pulse-echo instruments, image storage and display. Review of Doppler ultrasound, image artifacts and quality management. This course can only be taken on a pass/fail basis. (1 lecture hour)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and DMIS 1102 or consent of instructor.

DMIS 2285***Clinical Sonographic Registry and Review***

1 Credit Hour

Intensive review of topics taught in DMIS 1121, DMIS 1122, DMIS 1131, and DMIS 1132. Preparation for taking the American Registry of Diagnostic Medical Sonography certification examination. Review of Diagnostic Medical Sonography applications in the specialties of abdominal/superficial structures and obstetrics/gynecology. This course can only be taken on a pass/fail basis. (1 lecture hour)

Prerequisite: Admission to Diagnostic Medical Imaging Sonography program and DMIS 1121, DMIS 1122, DMIS 1131, and DMIS 1132 or consent of instructor.

DMIS 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

DMIS 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Early Childhood Education and Care (ECEC)

ECEC 1100***Intro to the Early Childhood Profession***

3 Credit Hours

Students will be introduced to the field of early childhood education and care. History and philosophies of early childhood education, types of early childhood programs, positive communication and guidance, play, considerations for diversity, current DCFS licensing requirements, professional roles and responsibilities of highly qualified early childhood educators, and developmentally appropriate practice (DAP) are emphasized. Students will also explore various ways early childhood programs support children's overall development. Lab component required, which includes field observations with the following age groups in licensed child care facilities: 15-23 months, 24-35 months, 36-60 months, as well as a Kindergarten classroom with a teacher holding a Professional Educator License. (2 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Category One.

ECEC 1101***Growth & Development of the Young Child***

3 Credit Hours

An in-depth study of all aspects of child growth and development from conception through adolescence. Child development theories, current research, interrelationship of domains, and multiple influences on development including trauma, family, peers, school, culture etc. will be emphasized. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

ECEC 1102***Child Guidance Practices***

3 Credit Hours

Students will examine theories, research, and best practices related to healthy social and emotional development of young children ages 0-8. Students will also learn the strategies to identify, assess, and promote healthy social and emotional development. Emphasis will be placed on positive guidance strategies that support the establishment of respectful reciprocal relationships with young children and their families. A lab component is required. (2 lecture hours, 2 lab hours)

Prerequisite: ECEC 1100 with a grade of C or better, or equivalent and ECEC 1101 with a grade of C or better, or equivalent.

ECEC 1110***Parenting and the Young Child***

2 Credit Hours

A practical analysis of parent-child interaction with emphasis on understanding developmental tasks of the early childhood years. Motivation and guidance as applied to child and parent are explored. (2 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ECEC 1116***Care Infant Toddler & Two-Year Child I***

3 Credit Hours

Examination of the developmental and learning needs of the infant, toddler, and two-year old child in group care, including the study of physical, social/emotional, cognitive, and language development and the exploration of child development within a socio-cultural context. Emphasis is placed on the early childhood professional's role in providing a safe, stimulating, and nurturing environment that fosters the optimum growth and development of the individual child. Observation of the group care of infants and toddlers will be required. Lab component will be required. (2 lecture hours, 2 lab hours)

Prerequisite: ECEC 1100, ECEC 1101, ECEC 1102, ECEC 2211, ECEC 2251, ECEC 2252, ENGL 1101, and SPEEC 1100, all with a grade of C or better, or consent of instructor.

ECEC 1117***Care Infant, Toddler & Two-Year Child II***

3 Credit Hours

Continuation of the study of development, education and care of infant, toddler and two-year-old children. The teacher's role in providing an environment that fosters the optimum growth and development of the individual child is examined. Thirty hours of laboratory work in group care of children aged six weeks to 36 months are required. (2 lecture hours, 2 lab hours)

Prerequisite: ECEC 1101 or ECEC 1116.

ECEC 1120***Family Child Care Management***

2 Credit Hours

This course includes the practical consideration of issues and responsibilities in providing family child care for infants and young children. (1 lecture hour, 2 lab hours)

ECEC 1121***Family Child Care Curriculum & Guidance***

2 Credit Hours

Specialized knowledge and skills for family child care providers. Curriculum and guidance skills appropriate for the multi-age groups of children in family child care. (1 lecture hour, 2 lab hours)

ECEC 1130***Methods: Discovery & the Physical World***

3 Credit Hours

Students will be introduced to a variety of methods for facilitating children's development in physical and logical-mathematical knowledge. Emphasis is on the early childhood educator's responsibilities in the implementation of science, technology, engineering, mathematics, blocks, and physical development and fitness. A lab component is required. (2 lecture hours, 2 lab hours)

Prerequisite: ECEC 1100, ECEC 1101, ECEC 1102, ECEC 2211, and ECEC 2251, all with a grade of C or better, or equivalent and consent of instructor.

ECEC 1140***Methods: Self-Expression & Social World***

3 Credit Hours

Students will be introduced to a wide variety of experiences and methods for developing children's self-expression and exposing them to a variety of aspects of the social world. Emphasis is on the early childhood educator's responsibility in the implementation of developmentally appropriate literacy, dramatic play, art, social studies, and music and movement experiences. A Lab component is required. (2 lecture hours, 2 lab hours)

Prerequisite: ECEC 1100, ECEC 1101, ECEC 1102, ECEC 2211, and ECEC 2251, all with a grade of C or better, or equivalent and consent of instructor.

ECEC 1151***Language and Literacy Development in a Diverse Classroom***

3 Credit Hours

Students will focus on the speech and language development of young children ages 0-8, as well as the practices to individualize teaching to support language and literacy development in a diverse classroom. Typical and atypical language development, the diverse factors that influence language and literacy development, developmentally appropriate methods, materials and environments, and supporting English language learners will be emphasized. Student will complete an observation and assessment of a child. (3 lecture hours)

Prerequisite: ECEC 1100, ECEC 1101, ECEC 2211, ENGL 1101, and SPEEC 1100 all with a grade of C or better or consent of instructor.

ECEC 1161***Multicultural Curriculum for Young Child***

2 Credit Hours

Introduction to multicultural curriculum activities, materials and environments for young children. Special emphasis on applying multicultural education principles to curriculum planning. (1 lecture hour, 2 lab hours)

ECEC 1162***Multicultural Perspectives Child Devlpmt***

2 Credit Hours

Exploration of multicultural perspectives of child care and development. Emphasis on cultural and family factors that shape and influence the contexts in which young children develop. (2 lecture hours)

ECEC 1163***Practicum: At-Risk Early Childhood Prog***

1 Credit Hour

Daily participation in an at-risk early childhood program for young children. Students will assist teachers in the program under the supervision of a faculty supervisor. Students apply knowledge and practice skills gained in child care classes. Seventy-five hours of practicum required. (5 lab hours)

Prerequisite: ECEC 1102, ECEC 1161, and ECEC 1162 or consent of instructor .

ECEC 1820***Selected Topics***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme. This course may be taken two times for credit as long as different topics are selected. (1 to 3 lecture hours)

ECEC 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within Early Childhood Education and Care to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

ECEC 2201***Creative Art Activities for the Young Child***

2 Credit Hours

Introduction to a variety of materials and experiences suitable for creative artistic expression of the young child. The use of various media to provide opportunities for expression and exploration is emphasized. (2 lecture hours)

ECEC 2203***Music and Movement for the Young Child***

2 Credit Hours

An introduction to music and movement experiences for the young child. The relationship of children's developmental needs to the music and movement curriculum is explored. Students will compile resources of music and movement activities. (2 lecture hours)

ECEC 2204***Child Care Environment***

2 Credit Hours

This course explores indoor and outdoor environments in child care centers that support the development of young children. Materials and equipment selection and room arrangement are included. (1 lecture hour, 2 lab hours)

ECEC 2206***Science and Nature for the Young Child***

2 Credit Hours

Introduction to theories and practice of science and nature curriculum for young children. Emphasis is placed on the planning, implementation and evaluation of developmentally appropriate activities and instructional materials. (2 lecture hours)

ECEC 2208***Mathematics for the Young Child***

3 Credit Hours

Students will be introduced to basic mathematical concepts and terminology, as well as the theories and practices, for teacher preparation in early childhood education for children ages 0-6. Students will be exposed to strategies to identify, assess, and promote mathematical understanding in young children. Emphasis will be placed on mathematical thinking, foundational mathematic skills, and the following concepts: numbers, measurement, shapes, patterns, spatial relations, and analysis of data. A lab component is required. (2 lecture hours, 2 lab hours)

Prerequisite: ECEC 1100 and ECEC 1101, both with a grade of C or better, or equivalent.

ECEC 2209***Developmentally Appropriate Technology***

2 Credit Hours

Students will explore developmentally appropriate uses of technology for young children through age 8. Emphasis will be placed on best practice and using technology as a tool for curriculum enhancement, communication, assessment, documentation, and inclusion. (2 lecture hours)

ECEC 2210***The Young Child With Special Needs***

2 Credit Hours

An introduction to child care services for young children (up to age 8) with special needs. Descriptions of special needs, curriculum, programs, services and current issues are included. (2 lecture hours)

Prerequisite: ECEC 1101 with a C or better, or equivalent, or consent of instructor.

ECEC 2211***Child Health, Safety and Nutrition***

3 Credit Hours

A comprehensive overview of current health, safety and nutritional needs of growing children. Appropriate methods to meet the needs of young children in group care settings are emphasized. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

ECEC 2220***Early Childhood Education Practicum***

4 Credit Hours

Practicum experience in the field of Early Childhood Education. Emphasizes the practical application of principles, practices, and theories of early childhood education while working with young children in a professional setting. Students will complete 300 hours in a DCFS licensed early childhood center. Students will also participate in a weekly practicum seminar. (20 clinical hours)

Prerequisite: ECEC 1100, ECEC 1101, ECEC 1102, ECEC 1116, ECEC 2211, ECEC 2245, ECEC 2251, ECEC 2252, ENGLI 1101, SPEEC 1100, Math Gen. Ed., and Science Gen. Ed. all with a grade of C or better. In addition, State of Illinois Criminal Background Check, including fingerprinting, must be passed as well as a DCFS medical background clearance with TB test and immunization clearance. This course requires consent of instructor.

ECEC 2221***Early Childhood Administration Practicum***

4 Credit Hours

Students will gain practical experience in early childhood administration while working with a child care center director, staff, young children, and families in a professional setting. Emphasis will be placed on the practical application of principles, practices, and theories of early childhood education and care. Students will complete the 300 documented hours in a DCFS licensed early childhood center as required for the State of Illinois Director Credential-Level 1. (20 lab hours)

Prerequisite: ECEC 1100, ECEC 1101, ECEC 1102, ECEC 1116, ECEC 2211, ECEC 2245, ECEC 2251, ECEC 2252, ECEC 2254, ECEC 2255, and ECEC 2256, ENGLI 1101, SPEEC 1100, Math Gen. Ed., and Science Gen. Ed. all with a grade of C or better. In addition, State of Illinois Criminal Background Check, including fingerprinting, must be passed as well as a DCFS medical background clearance with TB test and immunization clearance. This course requires consent of instructor.

ECEC 2226***Development of the School-Age Child***

2 Credit Hours

A study of physical, cognitive and affective domains of the 6 to 12 year old child's growth and development. (2 lecture hours)

ECEC 2227***Guidance of the School-Age Child***

2 Credit Hours

A study of guidance practices that support the development of school-age children in group settings. (2 lecture hours)

ECEC 2228***Activities for School-Age Children***

2 Credit Hours

This course introduces students to the process of planning, implementing and evaluating activities for school-age children in a group setting. (1 lecture hour, 2 lab hours)

ECEC 2230***Foundations of Early Childhood Education***

3 Credit Hours

This course aligns to CDA competencies and provides an overview of basic principles of child development and learning, professionalism in the field of early childhood education and care, and fundamentals of planning and maintaining safe and healthy learning environments. Students will gain the foundational knowledge and skills for supporting children's physical, intellectual, social and emotional well being as well as for building positive and productive relationships with children and families. A lab component is required. (2 lecture hours, 2 lab hours)

ECEC 2245***Preschool Methods of Intentional Teaching and Learning***

4 Credit Hours

Students will be introduced to a variety of methods for facilitating the preschooler's development of physical and logical-mathematical knowledge and for developing the preschooler's self-expression to various aspects of the social world. Emphasis is on the student's ability to plan, implement, and evaluate developmentally appropriate literacy, dramatic play, art, social studies, nature, math, STEM, and movement experiences. The student will be responsible for demonstrating how to be present, connect, and extend the children's learning. Demonstration of professional dispositions will be emphasized. A clinical component is required. Students will spend the semester in a Department of Children and Family Services (DCFS) licensed early childhood classroom serving children between the ages of 3-6 (not in Kindergarten). (3 lecture hours, 2 lab hours)

Prerequisite: ECEC 1100, ECEC 1101, ECEC 1102, ECEC 2211, ECEC 2251, ECEC 2252, ENGL 1101, SPEEC 1100, Math Gen. Ed., and Science Gen. Ed. all with a grade of C or better. In addition, State of Illinois Criminal Background Check, including fingerprinting, must be passed as well as a DCFS medical background clearance with TB test and immunization clearance. This course requires consent of instructor.

ECEC 2250***Play and Learning of the Young Child***

3 Credit Hours

This course explores the significance of play experiences that promote growth and learning. Emphasis is placed on the relationship between the adult and the child at play, developing appropriate play experiences and facilitating play. (3 lecture hours)

Prerequisite: ECEC 1100 and ECEC 1101, both with a grade of C or better, or equivalent, or consent of instructor.

ECEC 2251***Curriculum Planning for the Young Child***

3 Credit Hours

Students will be exposed to a comprehensive overview of developmentally appropriate curriculum for young children from birth through age eight. Planning, implementing, and evaluating curriculum based on the needs and interests of young children will be emphasized. A lab component is required. (2 lecture hours, 2 lab hours)

Prerequisite: ECEC 1100, ECEC 1101, and ECEC 2211 all with a grade of C or better, or equivalent, or consent of instructor.

ECEC 2252***Child/Family/Community Relations & Resources***

3 Credit Hours

Students are introduced to the knowledge and skills early childhood professionals need to build effective interrelationships with the child, family, and community by applying course content through in-class experiences and service learning. Emphasis will be placed on diverse family and community characteristics, legislation, supporting families, building partnerships, and encouraging family involvement. Programs and services for children and their families will be explored. A service learning component is required. (3 lecture hours)

Prerequisite: ECEC 1100 and ECEC 1101 with a grade of C or better, or equivalent, or consent of instructor.

ECEC 2254***Administration of an Early Childhood Center - Program Operations***

3 Credit Hours

An overview of early childhood program operations including legal and professional standards. Students explore licensing and accreditation standards in relation to an existing early childhood center. Design and management as well as storage and maintenance of indoor and outdoor environments are included. (3 lecture hours)

ECEC 2255***Administration of an Early Childhood Center - Practices & Procedures***

3 Credit Hours

Information about the management processes of early childhood programs. Fiscal and legal structures, community outreach programs, and early childhood program marketing, public relations and promotional strategies are included. (3 lecture hours)

ECEC 2256***Administration of an Early Childhood Center - Staff, Families, & Children***

3 Credit Hours

Exploration of the knowledge and skill application of early childhood program staff management and supervision. Development of effective human relations with diverse groups is described. Early childhood leadership skills and child advocacy are included. (3 lecture hours)

ECEC 2260***Early Childhood Professional***

3 Credit Hours

Students will explore the dimensions of becoming an early childhood professional including ethics, relationships with colleagues, time management, advocacy, critical reflection, and career development. (3 lecture hours)

Prerequisite: ECEC 1100 and ECEC 1101, both with a grade of C or better, or equivalent, or consent of instructor.

ECEC 2821***Advanced Selected Topics I***

2 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

Prerequisite: This course is designed for students nearing completion of the Early Childhood Education and Care program or for child care practitioners. Students should have attained minimum Department of Children and Family Services credit hours for a child care director position before enrolling in the course.

ECEC 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ECEC 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Earth Science (EARTH)

EARTH 1101 (P1 907L)***Physical Geology of Earth's Interior***

4 Credit Hours

Processes important in understanding Earth's interior. Planetary segregation, heat flow, Earth's magnetic field, earthquakes, continental drift, paleomagnetism, seafloor spreading, mantle plumes, and crustal deformation are investigated in light of the unifying theory of plate tectonics. Physical and chemical properties of minerals and the genesis of igneous, sedimentary and metamorphic rocks, and their relationship to the rock and tectonic cycles. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1102 (P1 907L)***Physical Geology of Earth's Surface***

4 Credit Hours

Geological processes involved in the creation of a variety of landform systems and sedimentary deposits. Weathering, mass wasting, transport, deposition, depositional environments, sediment lithification, analysis and interpretation of topographic maps, cross-sections, and aerial photographs. Plate tectonic theory, volcanism, and rock and mineral forming processes are integrated. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1105 (P1 908L)***Environmental Geology***

4 Credit Hours

A study of the impact of geological processes on society and the environmental consequences of the use of Earth resources by humans. Includes analyses of geologic hazards (including earthquakes, volcanic eruptions, groundwater contamination, flooding) and the attempts made to evaluate and mitigate their risks to human populations. Special attention will be focused on environmental impacts of land-use and economic resource development. (3 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Category One. Recommended course: MATH 0465 or MATH 0481. Successful completion of high school algebra is assumed.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1110 (P1 905L)***Introduction to Meteorology***

4 Credit Hours

A first look at various aspects of meteorology, including solar radiation, global circulation, environmental issues, winds, stability, precipitation processes, weather systems and severe weather. Basic physical principles, meteorological terminology, societal impacts, and weather analysis will be explored. (3 lecture hours, 2 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1111 (P1 905)***Climate and Global Change***

3 Credit Hours

Introduction to the earth's climate, climate change, and the interactions between climate and the global environment. Discussion of large-scale physical processes explaining weather and climate will lead to discussions on how climate and climate change impact the global ecosystem. Primary concepts studied will include climate classifications, anthropogenic and natural factors leading to climate change and potential impacts of climate variability and climate change. Human impacts, government assessment, response and mitigation of a changing global environment will be discussed. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1112***Introduction to Thunderstorm Lab***

2 Credit Hours

Classroom preparation will include thunderstorm forecasting basics, structure and evolution of supercell thunderstorms, spotter techniques and severe weather safety. Students will be involved in daily forecast discussions and weather analysis and will journal their storm chase experiences as they observe severe weather events. (1 lecture hour, 2 lab hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1115 (P1 905L)***Severe and Unusual Weather***

4 Credit Hours

In-depth study of meteorological phenomena relating to thunderstorms, El Nino/Southern Oscillation events, and tropical storms. Topics will include severe weather spotting, weather radar, atmospheric soundings, tornado genesis, El Nino, tropical meteorology, hurricanes and an introduction to numerical weather prediction. Basic physical principles, their relation to weather events, and weather's impact on society are also explored. (3 lecture hours, 2 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1116***Weather Analysis and Forecasting I***

1 Credit Hour

A study of day-to-day weather patterns with an emphasis on understanding the basics of meteorological processes and forecasting. Students learn to read weather reports and weather maps needed to analyze current conditions and forecast weather. Taking advantage of a fully operational weather laboratory, students monitor current weather conditions locally and across the nation. (2 lab hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1117***Weather Analysis and Forecasting II***

1 Credit Hour

A continuation of Weather Analysis and Forecasting I. Students continue investigating sources of data, learn to analyze raw images, and interpret numerical weather forecasts. Taking advantage of a fully-operational weather laboratory, students monitor current weather conditions locally and across the nation. (2 lab hours)

Prerequisite: EARTH 1116 or equivalent. Course requires Reading Placement Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1119 (P1 905)***Weather Impacts and Preparedness***

3 Credit Hours

An investigation of weather and climate impacts that affect various populations within the United States including snow, drought, floods, severe weather, and temperature extremes among other phenomena. Sociological impacts, preparedness, and warning and mitigation strategies will be discussed. (3 lecture hours)

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1120 (P1 906)***Introduction to Astronomy***

3 Credit Hours

Examines the history of astronomy, observations of astronomical phenomena and concepts, the structure and evolution of the solar system, the birth, life, and death of stars, properties of galaxies and main concepts of cosmology. Provides a basic understanding of matter and radiation. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Recommended course: MATH 0465 or MATH 0481; successful completion of high school algebra is assumed.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1122 (P1 906L)***Astronomy: The Solar System***

4 Credit Hours

An introduction to the solar system using recently available astronomical data. Major topics include scale models, planetary properties, earth-sun relationships, lunar geology, terrestrial planets, jovian planets, natural satellites and ring systems, asteroids, comets, meteoroids, meteors, meteorites, interplanetary space probes and formation theories. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1124 (P1 906L)***Astronomy: Stars and Galaxies***

4 Credit Hours

A study of stars, galaxies, deep space objects and cosmology utilizing the latest astronomical discoveries. Major topics include constellations, the Sun, stellar types, motions, parallax, magnitudes, luminosity, spectra, classifications, clusters, evolution, quasars, nebula, galaxy classification and composition, the Big Bang, inflation and cosmology. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1126 (P1 906L)***Observational Astronomy***

3 Credit Hours

Students will be introduced to observational astronomy. This will include observing the sky with the use of telescopes and other instruments, locating and viewing astronomical objects visually and electronically, and using astronomical databases. Students will learn how to explore the universe to better understand planets, stars, and galaxies. (2 lecture hours, 2 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better, or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1130 (P1 905L)***Introduction to Oceanography***

4 Credit Hours

An introduction to oceanography that focuses on the dominating influence the World Ocean has upon earth processes. Topics include ocean basin evolution, sea water chemistry and physics, interrelationships between the ocean and atmosphere, waves, currents, tides, coastal development, marine communities and human impacts. (3 lecture hours, 2 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1131 (P1 905)***Fundamentals of Oceanography***

3 Credit Hours

Students will be introduced to physical oceanography. Topics include ocean basin evolution by plate tectonics, seawater chemistry, waves, currents, tides, coastal processes, and the oceanic influences upon weather, climate, and climate change. Emphasis is placed on the natural resources provided by the world ocean and societal impacts upon the coastal and marine environments. The course is oriented to students in non-science majors. Students receive credit for either EARTH 1130 or EARTH 1131 but not both. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Recommended: MATH 0465 or MATH 0481 with a grade of C or better, or equivalent. Successful completion of high school algebra is assumed.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1135 (P1 905L)***Water Science-Fundamentals of Hydrology***

4 Credit Hours

An introduction to the water cycle, the dynamic processes of surface water, and ground water. Students investigate and analyze the impacts of population growth, urbanization, weather, and climate upon hydrological processes and water resource sustainability. One field trip is required. For any student concerned about water resources and those with intended majors in geology, hydrology, meteorology, environmental sciences/engineering, or resource management. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1140 (P1 905L)***Fundamentals of Earth Science***

4 Credit Hours

An introduction to the study of the Earth as a planet. Topics from the disciplines of astronomy, meteorology, oceanography and geology are explored to develop an appreciation of our planet as an integrated system. Includes analyses of the dynamic processes of the Earth's interior, surface, oceans, atmosphere and astronomical surroundings. Students receive credit for either Earth Science 1140 or 1141 but not both. (3 lecture hours, 2 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1141 (P1 905)***Introduction to Earth Science***

3 Credit Hours

A non-laboratory introduction to the study of the Earth as a planet intended for non-science majors. Topics from the disciplines of astronomy, meteorology, oceanography, and geology are explored to develop an appreciation of our planet as an integrated system. Includes analyses of the dynamic processes of the Earth's interior, surface, oceans, atmosphere, and astronomical surroundings. Students receive credit for either Earth Science 1140 or 1141 but not both. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better, or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the Earth Science discipline. These courses require direct experience and focused reflection in an in-depth study of a specific earth science topic and/or the critical analysis of contemporary issues in earth science. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of earth science concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit.

Prerequisite: Course requires Reading Placement Test Score-Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2102***Origin and Evolution of the Earth***

4 Credit Hours

Processes and geologic events that are important in understanding the origin and evolution of the earth. Origin of the solar system, planetary segregation, absolute and relative age dating methods, the sedimentary record, evolution of the continents, oceans, and atmosphere. Plate tectonics, crustal evolution and biologic development over the course of geologic time will be a unifying theme. (3 lecture hours, 2 lab hours)

Prerequisite: EARTH 1101, EARTH 1120, EARTH 1130, or EARTH 1140, with a grade of C or better or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2103***Geologic Field Investigations***

3 Credit Hours

Geologic field investigation involving the stratigraphy, structural geology and economic geology of a selected region within the United States or abroad. Basic methods of geologic field work including rock and outcrop description, sampling methods, measurement of stratigraphic sections, strike and dip measurements, orienteering and map interpretation. A supervised field investigation involving 10 to 14 days of outdoor field work and pre- and post-trip class meetings. (1 lecture hour, 4 lab hours)

Prerequisite: EARTH 1101, EARTH 1102, or EARTH 1140, or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2110***Intermediate Meteorology***

4 Credit Hours

A quantitative first look at the science of meteorology. Physical concepts will be examined using algebraic methods to prepare students for material using higher mathematics. Operational, physical and dynamical meteorology are discussed to give students an overall understanding of atmospheric science. Equations of motion, thermodynamics and the primitive equations will be among the topics covered. (4 lecture hours)

Prerequisite: MATH 2231 or equivalent; or qualifying score on the mathematics placement test, and either EARTH 1110 or EARTH 1115 or equivalent, or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2112***Thunderstorm Lab***

2 Credit Hours

Applying knowledge and previous experience of severe weather, students will travel across the United States and Canada to experience severe thunderstorms first-hand. Classroom preparation includes thunderstorm forecasting and analysis, directing weather discussions, and improving understanding of severe weather meteorology. Students will lead daily forecast discussions and will journal their experiences and meteorological conditions during the field study. (1 lecture hour, 2 lab hours)

Prerequisite: EARTH 1115 with a grade of C or better, or equivalent and concurrent enrollment in EARTH 2118, or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2114***Aviation Meteorology***

2 Credit Hours

An introduction into meteorological phenomena and weather data that is fundamental to aviation. The basics of weather-related flight hazards including thunderstorms, icing, wind shear, and turbulence will be discussed. Students will interpret various text and charted aviation weather products as used commonly by pilots including Aviation Routine Weather Reports (METARs), Terminal Aerodrome Forecasts (TAFs), and graphical information available from the Aviation Weather Center. (2 lecture hours)

Prerequisite: EARTH 1110 and EARTH 1116, both with a grade of C or better, or equivalent or consent of instructor.

EARTH 2115***Mesoscale Meteorology***

4 Credit Hours

In-depth study of meteorological phenomena with short temporal and small spatial scales. Topics will include tools for mesoscale analysis, mesoscale modeling, thermally-forced circulations, fog, mesoscale winter events, and the morphology of convective systems including squall lines, mesoscale convective systems and supercells and their associated threats including flash floods and tornadoes. Other topics of current research interest will also be covered. (4 lecture hours)

Prerequisite: EARTH 1115 or equivalent or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2116***Adv Weather Analysis & Forecasting I***

1 Credit Hour

A continuation of Weather Analysis and Forecasting II, EARTH 1117. Emphasis is on independent analysis of weather events, forecast preparation and mastery of hand data analysis. Taking advantage of a fully operational weather laboratory, students monitor current weather conditions locally and across the nation. (2 lab hours)

Prerequisite: EARTH 1117 and MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better, or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2117***Adv Weather Analysis & Forecasting II***

1 Credit Hour

A continuation of Advanced Weather Analysis and Forecasting I. Students prepare a weekly forecast for the Chicago metropolitan area generally and DuPage County specifically, and track and evaluate their forecasting accuracy. Taking advantage of a fully operational weather laboratory, students monitor current weather conditions locally and across the nation. (2 lab hours)

Prerequisite: EARTH 2116 or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2118***Severe Weather Lab***

1 Credit Hour

An in-depth study of severe weather forecasting and analysis. An emphasis is placed on hand analysis of raw data, assessing short term numerical weather models, and nowcasting. Students will monitor events prior to and during severe weather events using real time radar and other data sources. Students will gain a better understanding of severe weather initiation and evolution. Local field trips to observe severe weather first-hand may be included. This course may be taken four times for credit. (3 lab hours)

Prerequisite: EARTH 1115 with a grade of C or better, or equivalent or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the Earth Science discipline, while building upon academic knowledge and skills acquired in introductory-level Earth Science classes. These courses require direct experience and focused reflection in an in-depth study of a specific Earth Science topic and/or the critical analysis of contemporary issues in Earth Science. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical applications of more complex earth science concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in the discipline or consent of the instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2820***Advanced Selected Topics I***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

EARTH 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

Economics (ECONO)

ECONO 1110***Consumer Economics and Personal Finance***

3 Credit Hours

An overview of personal and family financial planning. Emphasis is placed on financial recordkeeping, consumer spending, tax planning, making buying decisions, purchasing insurance, selecting investments, and retirement and estate planning. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ECONO 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). (1 to 3 lecture hours, 1 to 3 lab hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ECONO 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ECONO 2200 (S3 900)***Principles of Economics***

3 Credit Hours

This is an introduction to both microeconomics and macroeconomics. It includes price theories, the behavior of the firm under various economic conditions, gross domestic product (GDP) analysis, the role of government, economic growth measurements, business cycle effects, money and banking; and international economics. This course is not recommended for economics majors or those pursuing a baccalaureate degree in any field of business. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ECONO 2201 (S3 901)***Principles of Macroeconomics***

3 Credit Hours

This course introduces students to general economics principles. It focuses on the determination of aggregate production and income, employment, output, price levels, and the role of money in the economy. Primary emphasis on monetary and fiscal policy, inflation, unemployment, economic growth, and international economics. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ECONO 2202 (S3 902)***Principles of Microeconomics***

3 Credit Hours

This course introduces fundamental decision-making theories by households and firms. It emphasizes the nature and functions of product and resource markets, the theory of the firm under varying conditions of competition and monopoly, and the role of government in promoting efficiency in the economy. Additionally, the course explores key concepts in international trade and the impact of trade restrictions on the overall economy. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ECONO 2210***Money and Banking***

3 Credit Hours

A descriptive, historical and analytical introduction to the role of money, monetary policy, financial institutions and central banks in the United States and internationally. (3 lecture hours)

Prerequisite: ECONO 2201. Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

ECONO 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Internship (Career and Technical Education) – Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ECONO 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ECONO 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ECONO 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Education (EDUCA)

EDUCA 1100***Introduction to Education***

3 Credit Hours

Students will be provided an introduction to teaching as a profession in the American education system, offering a variety of perspectives on education including historical, philosophical, social, legal, and ethical issues in a diverse society. The course includes organizational structure and school governance. A 20 hour clinical experience is required. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

EDUCA 1101***School Procedure***

3 Credit Hours

Students will examine various policies, procedures, and routine activities that are part of the teacher's role. Weekly seminars focus on the development of human relations and problem solving skills necessary for an effective classroom. A 20 hour clinical experience is required.

EDUCA 1100 is strongly recommended. (2 lecture hours, 2 lab hours)

Prerequisite: Recommended: EDUCA 1100 with a grade of C or better.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

EDUCA 1102***Educational Assessment***

3 Credit Hours

Students will be introduced to the different types of assessments, implications of those assessments at the classroom, state, national, and international levels. Students will also be introduced to the art of writing quality assessments. (3 lecture hours)

EDUCA 1150***Technology Integration in K-12 Schools***

3 Credit Hours

Students will be introduced to integrating instructional technology into K-12 schools. Emphasis is on current and emerging theories of learning with instructional technology and how to best integrate, utilize, and adapt technology as a resource in teaching and learning. A variety of technology will be incorporated, and practical application of technology in traditional and e-learning environments will be addressed. (3 lecture hours)

Prerequisite: EDUCA 1100 with a grade of C or better, or equivalent.

EDUCA 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit.

EDUCA 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected education topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

EDUCA 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

EDUCA 2201***Education for Exceptional Children***

3 Credit Hours

Students will be introduced to children with exceptionalities, including the historical, legal, and philosophical foundations of special education as identified by the Individuals with Disabilities Education Act (IDEA). The primary focus will be on children with disabilities and children at-risk. A 20 hour clinical experience is required. (2 lecture hours, 2 lab hours)

Prerequisite: Recommended: EDUCA 1100 with a grade of C or better or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

EDUCA 2202***Introduction to Learning Disabilities***

3 Credit Hours

Students will be introduced to an overview of learning disabilities, which includes the etiology and diagnostic procedures, classification, characteristic, and teaching strategies. Coursework also includes discussion of service delivery models and strategies for meeting the needs of students with learning disabilities in the least restrictive environment. EDUCA 2201 is recommended prior to enrollment. (2 lecture hours, 2 lab hours)

Prerequisite: Recommended: EDUCA 2201.

EDUCA 2220***Instructional Psychology***

3 Credit Hours

Students will be introduced to psychological principles underlying educational practice with emphasis on application for instruction and assessment. Learner-centered instruction and diversity will also be discussed. (3 lecture hours)

Prerequisite: Recommended: EDUCA 1100 with a grade of C or better or equivalent.

EDUCA 2230***Diversity in K-12 Schools***

3 Credit Hours

Students will be introduced to aspects of diversity in K-12 schools. The course will emphasize home-school communication and culturally responsive teaching. Learning to support students from diverse populations will be addressed. (3 lecture hours)

Prerequisite: Recommended: EDUCA 1100 with a grade of C or better or equivalent.

EDUCA 2250***Practicum: Paraprofessional/K-12 Classrm***

3 Credit Hours

=Students will participate on a regular basis in a K-12 school. Students will assist K-12 students under the supervision of a licensed teacher. 150 hours of practicum are required. (6 lab hours)

Prerequisite: Consent of instructor or mandatory testing: students must pass ACT Work Keys exam prior to enrollment.

EDUCA 2700***Best Practices in Online Education***

4 Credit Hours

Distance education and an online learning experience from a student and faculty perspective, including learning management systems, principles and theories of online education, key competencies, and best practices for successful distance education. This is one of three courses required for the TOUT (Teaching Online Utilizing Technology) Certificate. (4 lecture hours)

EDUCA 2710***Multimedia Applications in Education***

3 Credit Hours

Use of multimedia applications to enhance student learning in an online environment. Students will use hardware and software to create and publish a variety of multimedia projects appropriate to educational applications. This is one of the three courses leading to the TOUT (Teaching Online Utilizing Technology) Certificate. (3 lecture hours)

EDUCA 2720***Course Design for Online Education***

3 Credit Hours

Practical experience designing, managing and facilitating a unit of instruction online using a learning management system. Learners will focus on principles of instructional design, assessment methods, and online tools that promote active, collaborative learning. This is one of three courses leading to the TOUT Certificate (Teaching Online Using Technology). (3 lecture hours)

EDUCA 2780***Video Applications in Education***

3 Credit Hours

Use of video applications and research to enhance student learning in an online environment. Students will use video cameras and editing software to create and publish a variety of video projects appropriate to educational applications. Special focus will be given to the benefits and concerns of video sharing in the learning environment. (3 lecture hours)

EDUCA 2800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in the discipline or consent of the instructor.

EDUCA 2820***Advanced Selected Topics I***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

EDUCA 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

EDUCA 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

EDUCA 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

EDUCA 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Electro-Mechanical Technology (ELMEC)

ELMEC 1101

Survey of Automation

3 Credit Hours

Automation technology, including robotics, programmable controllers (PLC), process control instrumentation, industrial electricity, plastics, motion controls, vision systems, and automatic guided vehicles. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ELMEC 1106

Power Electricity and Rotating Machines

4 Credit Hours

This course focuses on electric circuits encountered in industry, and covers the characteristics of the different electrical motors and transformers. (3 lecture hours, 3 lab hours)

ELMEC 1110

Motor & Generator Fundamentals

3 Credit Hours

Basic principles for Alternating Current (AC) and Direct Current (DC) motors and generators. Motor and generator theory, operation, ratings, speeds, and enclosures. Analysis of efficiency, power service factors, and frame sizes. Motor control concepts, including ladder and wiring drawings. Control devices, including sensors, control transformers, and starters. (2 lecture hours, 2 lab hours)

ELMEC 1120

Residential Wiring

3 Credit Hours

All facets of correct wiring methods and techniques, based on the National Electrical Code (NEC). Room by room, circuit by circuit, installation and inspection with an emphasis on symbols, branch circuits, service drops, ground-fault circuit-interrupters (GFCI), low voltage circuits, and security system circuitry. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ELMEC 1130

Industrial Electricity

3 Credit Hours

Industrial electricity, circuits, devices, and power. The use of instruments on circuit analysis and test equipment. (2 lecture hour, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ELMEC 1140

Commercial and Industrial Wiring

3 Credit Hours

Designed to provide the electrician with tips and techniques for wiring in commercial buildings, offices, stores, manufacturing and other industrial environments. High voltage branch feeders, motors, appliance service, special systems and overcurrent protection are covered. Emphasis is on the National Electrical Code (NEC), minimum requirements pertaining to high and medium voltage motors, wiring, switchgear and power distribution. (2 lecture hours, 2 lab hours)

ELMEC 1141

Hydraulics and Pneumatics

3 Credit Hours

Principles of fluids at rest and in motion. Hydraulic and pneumatic pumps, motors, cylinders, boosters, valves, regulators, and circuitry to transmit and control power. (2 lecture hours, 2 lab hours)

ELMEC 1150

National Electrical Code

3 Credit Hours

An overview of the current national electrical code (NEC) with emphasis on reading, interpretation and revisions. Definitions and terminology are covered. (3 lecture hours)

ELMEC 1171

Introduction to Robotic Technology

3 Credit Hours

Introduction to the basic theory and operation of robots in industrial automation. Basic robot and work-place design, safety procedures, and robotic applications are studied. (2 lecture hours, 2 lab hours)

ELMEC 1190

Intro to Programmable Logic Controllers

3 Credit Hours

A survey of programmable logic controllers (PLC). Terminology, basic memory structure, I/O's (input/outputs), processors, and programming devices. Basics of programming and applications. (2 lecture hours, 2 lab hours)

ELMEC 1400

Maintenance Management Systems

3 Credit Hours

Overview of various computerized maintenance management systems. Topics include storeroom inventory, preventive maintenance procedures and scheduling, predictive maintenance costs, records and tracking, International Standards Organization (ISO) certification; training and vendor records. (3 lecture hours)

ELMEC 1410

Preventive and Predictive Maintenance

3 Credit Hours

Fundamentals of preventive and predictive maintenance using vibration analysis, equipment history, repair records and tracking systems. Procedures for identifying and implementing maintenance practices. Scheduled maintenance vs. predictive maintenance, charts and predictive maintenance, analysis of dimension signatures for bearings, motors and pumps, and development of anticipatory failure analysis. (2 lecture hours, 2 lab hours)

ELMEC 1420

Drive Components

2 Credit Hours

A hands-on approach to gears and gearing systems, chains and sprockets, belts and sheaves, brakes and clutches, couplings and coupling alignment, bearings and lubrication. (1 lecture hour, 3 lab hours)

ELMEC 1820

Selected Topics I

1-4 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. May be taken 3 times for credit. (1 to 3 lecture hours, 2 to 4 lab hours)

ELMEC 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline, and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (8 lab hours)

Prerequisite: Consent of instructor is required.

ELMEC 2410***Programmable Controller II (PLC II)***

3 Credit Hours

Data manipulation within programmable controllers (PLC) including data transfer, arithmetic functions, shift registers, and sequencers. Also, Industrial Networks. (2 lecture hours, 2 lab hours)

Prerequisite: ELMEC 1190 with a grade of C or better, or equivalent or consent of instructor.

ELMEC 2420***Programmable Controller III***

3 Credit Hours

Advanced topics in programmable controllers (PLCs) such as data highways, programming modules, and on-line programming using manufacturer's advanced software, process conversions to programmable controls and critical areas of process controls. Simulated applications of real-time processes comprise the majority of the course work, such as injection molding machines, and transfer pad printing. (2 lecture hours, 2 lab hours)

Prerequisite: ELMEC 2410 with a grade of C or better or consent of instructor.

ELMEC 2510***Process and Automation Controls***

3 Credit Hours

Introduction to process control language, symbols and principles of instrumentation with emphasis on temperature, pressure, level, weight, and flow measurement, including calibration of transmitters, process feedback, and feedforward loops. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1100 or equivalent.

ELMEC 2520***Industrial Control and Data Acquisition***

3 Credit Hours

An in-depth study of force, stress, strain, linear position, weight and mass measurement. Also included are analytical process measurements such as pH, conductivity, and resistivity. Major emphasis is given to control elements in process loops and electrical, pneumatic, and hydraulic actuators. Introduction to digital process controllers and in-depth study of piping and instrumentation drawings (P&ID). Additionally, a comprehensive study of intrinsic safety and instrument purging are included. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1100 and ELMEC 2510 are recommended.

ELMEC 2525***Industrial Communication Protocols***

3 Credit Hours

Introduction to the industrial communication protocols of industrial control systems (ICS). (2 lecture hours, 2 lab hours)

ELMEC 2600***Motion Control: Motor Dr Application and Control***

3 Credit Hours

An introduction to motion control, including: servo motors, DC servo drivers with control circuits, alternating current (AC) motors, steppers, actuators, sensors, fundamentals of basic control principles, and industrial and engineering applications of motion control systems. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1100 with a grade of C or better, or equivalent or concurrent enrollment in ELECT 1100, or consent of instructor.

ELMEC 2620***Critical Thinking in Technical Applications***

2 Credit Hours

Manufacturing processes and parameters that contribute to the system troubleshooting procedures. Through case studies and practical application, a system of thinking is developed to determine fault isolation and failure. (1 lecture hour, 2 lab hours)

ELMEC 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ELMEC 2863***Internship (Career & Technical Ed)***

3 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 225 clock hours for three semester credit hours. (15 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ELMEC 2864***Internship (Career & Technical Ed)***

4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 300 clock hours for four semester credit hours. (20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ELMEC 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Electronics Technology (ELECT)

ELECT 1100***Electricity and Electronics Fundamentals***

3 Credit Hours

Basic concepts in electronics are studied. An overview of direct and alternating current, circuit laws, components, troubleshooting, and use of test equipment. Hands-on experience, projects, and practical applications are included. (2 lecture hours, 2 lab hours)

ELECT 1101***Circuits I***

3 Credit Hours

Introduction to basic concepts in electronics and electricity. Topics include direct current, alternating current, circuit laws, components, troubleshooting, and use of test equipment. In addition to passive component circuit analysis, the students will learn about operational amplifier circuits. These circuits include the inverting and non-inverting amplifier, the mixing amplifier, and the differential amplifier. (6 lab hours)

Prerequisite: ELECT 1100 with a grade of C or better, or equivalent or consent of instructor.

ELECT 1102***Circuits II***

4 Credit Hours

Advanced concepts in circuit electronics. Topics include filtering, resonance, time and frequency response, troubleshooting, and use of test equipment. Hands-on experience, practical applications, and projects are included. Teamwork, critical thinking, and problem solving are emphasized. (2 lecture hours, 4 lab hours)

Prerequisite: ELECT 1101 with a grade of C or better, or equivalent or consent of instructor.

ELECT 1110***Introduction to Technology***

2 Credit Hours

Students will develop an understanding of the fields of technology such as computers, telecommunications, electronics, mechanics and other related fields. Through project based hands-on learning activities, students will have an opportunity to apply theory to real problems as they develop skills in solving technological problems. (1 lecture hour, 2 lab hours)

ELECT 1111***Introduction to Robotics***

3 Credit Hours

Introduction to fundamental robotic concepts, basic robot characteristics, and review of robotic applications. Hands-on experience, practical applications and projects. Teamwork, critical thinking and problem solving are emphasized. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1100 or equivalent, or consent of instructor.

ELECT 1118***Calculus for Electronics***

2 Credit Hours

Basic principles of differential and integral calculus and differential equations applicable to circuit analysis. (2 lecture hours)

Prerequisite: MATH 1432 (or college equivalent) or qualifying score on the mathematics placement test or qualifying A.C.T. math score and ELECT 1102 or consent of instructor.

ELECT 1120***Electronic Documentation and Fabrication***

3 Credit Hours

Introduction to electronic drafting and documentation. Topics include electronic schematics and documentation, printed circuit board documentation, drafting techniques using Computer Assisted Drafting and Design (CADD) software, and electronic manufacturing methods. (2 lecture hours, 2 lab hours)

ELECT 1130***Electronics Materials and Fabrication***

2 Credit Hours

Electronic equipment construction, assembly, repair, cable soldering techniques and fabrication. Coverage of the fundamentals of electronic design, fabrication and documentation, delineating various troubleshooting and test procedures, hands-on experience with connectors, fasteners, troubleshooting and testing of electronic systems. Testing of integrated circuits and personal computer boards. Concepts reinforced through student projects. (1 lecture hour, 2 lab hours)

Prerequisite: ELECT 1100 with a grade of C or better or equivalent or consent of instructor.

ELECT 1141***Digital Fundamentals***

3 Credit Hours

Introduction to basic concepts in digital electronics. Basic discrete electronics, digital logic, circuit laws, components, troubleshooting and use of test equipment. Hands-on experience, practical applications and projects. Teamwork, critical thinking and problem solving are emphasized. (2 lecture hours, 2 lab hours)

ELECT 1151***Electronic Devices and Applications***

4 Credit Hours

Basic concepts in electronic devices. Topics include diode and transistor fundamentals and applications, operational amplifier circuits, measurement and control circuits troubleshooting, and use of test equipment. Hands-on experience, practical applications, and projects. Teamwork, critical thinking, and problem solving are emphasized. (2 lecture hours, 4 lab hours)

Prerequisite: ELECT 1100 or consent of instructor.

ELECT 1152***Electronic Devices and Applications 2***

4 Credit Hours

A continuation of Electronic Devices and Applications I. Advanced concepts in electronic devices. Topics include diode and transistor applications, troubleshooting and use of test equipment. Hands-on experience, practical applications and projects. Teamwork, critical thinking and problem solving are emphasized. (2 lecture hours, 4 lab hours)

Prerequisite: ELECT 1151 with a grade of C or better or equivalent, or consent of instructor.

ELECT 1161***Modern Communications***

3 Credit Hours

Introduces basic concepts in wireless telecommunication electronics and circuits. Covers fundamentals of analog, and digital communications, and modern wireless communication techniques. (2 lecture hours, 2 lab hours)

ELECT 1162***Electronic Communication 2***

4 Credit Hours

A continuation of Electronic Communication 1. Advanced concepts in analog and digital communications and digital telecommunication circuits. Transmission lines, antennas, cell systems, networks, fiber-optics, troubleshooting and use of telecommunication test equipment. Hands-on experience, practical applications and projects. Teamwork, critical thinking and problem solving are emphasized. (2 lecture hours, 4 lab hours)

Prerequisite: ELECT 1161 or equivalent, or consent of instructor.

ELECT 1201***Renewable Energy Fundamentals***

2 Credit Hours

Survey of renewable energy technology including wind turbines and solar photovoltaic (PV) power technology. (1 lecture hour, 3 lab hours)

ELECT 1221***Introduction to Biomedical Instrumentation Technology***

3 Credit Hours

Introduction to operation and maintenance of biomedical equipment and instrumentation. Basic terminology, fundamental measurements, recording and monitoring of medical instrumentation will be covered. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1100 with a grade of C or better, or equivalent is recommended.

ELECT 1820***Selected Topics I***

1-4 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours, 2 to 4 lab hours)

ELECT 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

ELECT 2001***Green Energy Systems***

3 Credit Hours

Advanced study of principles of operation, testing, and diagnosis of green energy systems. These systems are evaluated both with discussion of theory, hands-on lab analysis and alternative energy systems feasibility study will be included of actual green energy systems. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1100 with a grade of C or better, or equivalent or ELECT 1201 with a grade of C or better, or equivalent or consent of instructor.

ELECT 2112***Motor Control and Industrial Wiring***

3 Credit Hours

Introduction to fundamental motor control concepts, basic control characteristics and review of control strategies. Hands-on experience, practical applications and projects. Teamwork, critical thinking and problem solving are emphasized. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1100 or equivalent, or consent of instructor.

ELECT 2201***Applied Electronics***

5 Credit Hours

A continuation of Electronic Devices and Applications II course. Advanced semiconductor circuits, linear and nonlinear op-amps, analog signal conditioning, and linear power supplies. Hands-on experience, practical applications and projects. Teamwork, critical thinking and problem solving are emphasized. (3 lecture hours, 4 lab hours)

Prerequisite: ELECT 1152 or equivalent, or consent of instructor.

ELECT 2215***Smart Grid Fundamentals***

3 Credit Hours

Course covers fundamentals of smart grid technology including basic functions, design criteria, tools, techniques, and technology need for building a smart grid. Electric power systems, power and control system engineering, and power electronics are integrated into the study of modeling and control of smart grid renewal energy systems. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1100, ELECT 1101, ELECT 1151, and ELECTC 1201, all with a grade of C or better, or equivalent or consent of instructor.

ELECT 2220***Electronic Instruments, Measurements, And Control***

3 Credit Hours

Methods of measurements of basic electric and electronic parameters. Study of circuits and characteristics of major electronic instruments. Basic control circuits. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1141 and ELECT 1151 or equivalent, or consent of instructor.

ELECT 2221***Biomedical Instrumentation Technology and Applications***

3 Credit Hours

A continuation of the study of biomedical instrumentation. Students will learn how to inspect, repair, and maintain biomedical instrumentation and equipment. Internal electronic circuitry and typical clinical environments are discussed. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 2221 with a grade of C or better, or equivalent or consent of instructor.

ELECT 2241***Wireless Telecommunications 1***

3 Credit Hours

Basic concepts in wireless electronics and circuits. Fundamentals of wireless telecommunication systems, frequency spectrum, cellular radio, troubleshooting, and use of telecommunication test equipment. Hands-on experience, practical applications and projects. Teamwork, critical thinking and problem solving are emphasized. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1162 or consent of instructor.

ELECT 2245***Programmable Logic Devices***

4 Credit Hours

Introduction to digital systems programming. Field Programmable Gate Arrays (FPGA) and Complex Programmable Logical Devices (CPLD) are used in this course to develop sample applications. These state-of-the-art devices are programmed using the Verilog and VHDL (Very High Density Programming Language) languages, popular in science and industry today. Hands-on experience, practical applications and projects. (2 lecture hours, 4 lab hours)

Prerequisite: ELECT 1141 or equivalent, or consent of instructor.

ELECT 2255***Industrial Controls***

3 Credit Hours

Introduction of basic concepts in industrial electronics. Topics include an overview of transducers and signal conditioning. Troubleshooting and use of test equipment. Principles and fundamental laws of control technology and industrial electronics are included. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1141 and ELECT 1151 or consent of instructor.

ELECT 2262***Introduction to Microprocessors***

4 Credit Hours

Introduction to basic concepts in microprocessor systems. Architecture of microprocessor systems, and investigation of all phases of troubleshooting and implementation of reliable microprocessor systems. Hands-on experience, practical applications and projects. Teamwork, critical thinking and problem solving are emphasized. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1101 and ELECT 1141 or equivalent, or consent of instructor.

ELECT 2273***Embedded Systems & Microcontroller Programming***

3 Credit Hours

Introduction to embedded systems applications involving real-time programming of microcontrollers and digital to analog conversion. Hands-on experience includes programming Reduced Instruction Set Computing (RISC) microcontrollers, Field Programmable Gate Arrays (FPGA) circuits, and digital signal processing using Operation Amplifiers, Digital Signal Processing (DSP), and Phase Locked Loop (PLL) chips. (2 lecture hours, 2 lab hours)

Prerequisite: ELECT 1141 with a grade of C or better, or equivalent, or consent of instructor.

ELECT 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ELECT 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Engineering (ENGIN)

ENGIN 1100

Engineering Orientation

1 Credit Hour

This is a first-semester orientation course intended for engineering majors. Students explore key concepts and strategies for success, including problem-solving techniques, time management, metacognition, and quantitative reasoning. It introduces career opportunities and requirements within the various engineering fields. (3 lab hours)

Prerequisite: MATH 1432 with a grade of C or better, or equivalent or a qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score.

ENGIN 1101 (EGR 941)

Engineering Graphics and Design

3 Credit Hours

This is an introductory-level course in engineering graphics and design intended for mechanical, civil, and industrial engineering majors. It provides students with skills in basic drafting, spatial visualization, conceptual design, and the latest engineering software. The course's graphics topics include orthographic projection, pictorials, dimensioning, sectioning, tolerances, and assembly drawings utilizing free hand sketching, two-dimensional computer aided design, and solid modeling. The course's design topics include problem definition, functional analysis, generation of design alternatives, and evaluation. Basic shop operations are introduced. (2 lecture hours, 3 lab hours)

Prerequisite: MATH 0482 with a grade of C or better, or equivalent or a qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score.

ENGIN 1820

Selected Topics I

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required.

ENGIN 1840

Independent Study

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

ENGIN 2201 (EGR 942)

Statics

3 Credit Hours

This course studies the internal forces that develop inside a structure or machine in equilibrium due to applied external forces. The course's topics begin with force vectors, moment vectors, distributed loads, particle equilibrium, and rigid body equilibrium in two and three dimensions. These concepts are applied toward the analysis of trusses, frames, machines, and beams. The course's topics conclude with a study of centroids, moments of inertia, friction, and virtual work. This course is intended for mechanical, civil, and industrial engineering majors. (3 lecture hours)

Prerequisite: MATH 2231 with a grade of C or better, or equivalent and concurrent enrollment in PHYSI 2111.

ENGIN 2202 (EGR 943)

Dynamics

3 Credit Hours

This is an advanced course that studies the motion of an object or system under the action of forces. The course's topics include kinematics and kinetics of particles and rigid bodies in two and three dimensions, non-Cartesian coordinate systems, absolute and relative motion, force, mass, acceleration, work, energy, impulse, momentum, and vibration. This course is intended for mechanical, civil, and industrial engineering majors. (3 lecture hours)

Prerequisite: ENGIN 2201 and PHYSI 2111, both with a grade of C or better or equivalent.

ENGIN 2203 (EGR 945)

Mechanics of Materials

3 Credit Hours

Analysis of stress, strain and deflection in machine and structural elements (axial, shear, torsion and bending loads). Stress and strain transformation using Mohr's Circle. Combined loading, repeated loading, theories of failure, related mechanical properties, and column buckling. Design of shafts, beams and columns. Elementary stress measurement devices. (3 lecture hours)

Prerequisite: ENGIN 2201.

ENGIN 2205

Engineering Thermodynamics

3 Credit Hours

Analysis of thermodynamic processes and systems. Engineering implications of the properties of ideal and real gases and vapors in thermal systems. Zeroth, first and second laws of thermodynamics, power and refrigeration systems, entropy and vapor power systems. (3 lecture hours)

Prerequisite: MATH 2233 or college equivalent.

ENGIN 2207

Engineering Economy

3 Credit Hours

Introduction to the economic aspects of engineering decisions. Topics include present and annual worth analysis, rate of return analysis, depreciation, inflation, income tax considerations, break-even analysis, sensitivity analysis, and financial decision making. Intended for mechanical, civil, and industrial engineering majors. (3 lecture hours)

Prerequisite: MATH 2232 with a grade of C or better, or equivalent.

ENGIN 2210 (EGR 931L)***Circuit Analysis I***

4 Credit Hours

This is an introduction to engineering circuit analysis and design. The topics include concepts of electricity and magnetism, circuit variables (units, voltage, inductance, power and energy), circuit elements (R, L, C and operational amplifiers), simple resistive circuits, circuit analysis (node-voltage, mesh-current, equivalents and superposition), transient analysis, and sinusoidal steady state (analysis and power). This course includes a lab component. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 2233 and PHYSI 2112, both with a grade of C or better, or equivalent.

ENGIN 2213 (EGR 932)***Introduction to Digital Systems***

4 Credit Hours

This is an introduction to digital circuit logic and design. The topics include representation of information, binary systems, Boolean algebra, Karnaugh maps, Quine-McClusky method, combinational switching circuits, multiplexers, decoders, encoders, latches, flip flops, registers, counters, sequential switching circuits, wired and stored program processor concepts (e.g. ROM), and VHDL. This course includes a lab component and is intended for computer engineering and electrical engineering students. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 1431 with a grade of C or better, or equivalent or a qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score.

ENGIN 2220***Circuit Analysis II***

4 Credit Hours

This is an advanced course in circuit analysis and design. The topics include three phase circuits, magnetically coupled circuits, frequency response of AC circuits, Fourier series, Fourier transforms, active filters, and two port networks. This course includes a lab component. (3 lecture hours, 3 lab hours)

Prerequisite: ENGIN 2210 and MATH 2270, both with a grade of C or better, or equivalent.

ENGIN 2223***Microcontrollers***

4 Credit Hours

This is an introduction to the structure of microprocessors. The topics include architecture, instruction set, assembly language programming, assembler directives, input/output operations, C language programming for an embedded device, timers, analog-to-digital conversion, interrupts, and timing analysis. The course includes a lab component and is intended for electrical and computer engineering students. (3 lecture hours, 3 lab hours)

Prerequisite: ENGIN 2213 and CIS 1400, both with a grade of C or better, or equivalent; or ENGIN 2213 and CIS 2485, both with a grade of C or better, or equivalent; or ENGIN 2213 and CIS 2541, both with a grade of C or better, or equivalent.

ENGIN 2233***Introduction to LC-3***

1 Credit Hour

This is an introduction to the LC-3 computer system. The topics include the von Neumann model of computer architecture, the architecture, datapath, and instruction set of the LC-3, and machine and assembly programming in LC-3. This course is intended for computer engineering and electrical engineering students. (1 lecture hour)

Prerequisite: ENGIN 2213 with a grade of C or better, or equivalent and corequisite enrollment in ENGIN 2223.

ENGIN 2820***Advanced Selected Topics I***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

ENGIN 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ENGIN 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ENGIN 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ENGIN 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

English (ENGLI)

ENGLI 0480***Preparation for College Reading***

4 Credit Hours

Builds the foundational reading skills necessary to prepare for college-level reading. Develops active reading habits that lead to comprehension and that introduce critical reading. Students read a wide variety of texts and show how the texts relate to their own lives as well as enhance their understanding of the world. This course may require use of academic support services. This course may be taken four times for credit. (4 lecture hours)

Prerequisite: Appropriate score on the Reading Placement Test(s).

ENGLI 0481***Approaches to College Reading I***

4 Credit Hours

Continues to develop the reading skills necessary for college-level reading. Emphasizes the role reading plays in acquiring new information and extends literal comprehension to more complex reading tasks required for difficult texts. This course may require use of academic support services. This course may be taken four times for credit. (4 lecture hours)

Prerequisite: ENGLI 0480 with a grade of C or better or appropriate score on the Reading Placement Test.

ENGLI 0489***Integrated Reading and Writing***

6 Credit Hours

Introduction to reading and writing as interdependent practices that rely on a process approach to each discipline. This course will develop students' critical reading and writing skills, engage them in the rigors of college work, and help them become familiar with reading and writing across disciplines, including texts of various formats. Students should gain practice in formal and informal assignments where rhetorical choices must be considered; where processes of preparation, development, and revision are utilized; and where connections between ideas in texts and in students' lives are integrated. Strategies to monitor and reflect on the reading and writing processes will be emphasized as well, supporting students in developing their metacognitive capacity, their ability to adapt their learning approaches as they complete assignments, and their ability to gauge their social-emotional growth as a student. (6 lecture hours)

Prerequisite: Placement into this course by advisor or instructor recommendation.

ENGLI 0490***Basic Writing***

4 Credit Hours

Build confidence and fluency in writing and the ability to generate well-developed texts. Students will understand how their texts fit in with a larger text-based world by developing a sense of audience and purpose. Classes are workshop-intensive sessions. Because of the strong relationship between writing and reading, students are immersed in reading activities. This course may be taken three times for credit. (4 lecture hours)

Prerequisite: Appropriate score on the Writing Placement Test.

ENGLI 0491***Approaches to College Writing I***

4 Credit Hours

The second of three developmental writing courses designed to prepare students for English Composition 1101. Focuses on creating effective sentences and paragraphs within the context of writing short. (250 to 350-word) essays, and on developing critical thinking skills. This course may be taken three times for credit. (4 lecture hours)

Prerequisite: Appropriate score on the Writing Placement Test.

ENGLI 0493***Approaches to College Writing II ALP***

3 Credit Hours

Part of the Accelerated Learning Program and intended for students whose placement indicates the need for additional instructional support to be successful in college-level writing. ENGLI 0493 requires concurrent enrollment in a linked section of ENGLI 1101 and provides intensive instruction, workshoping, and programming that supports students' development as writers, readers, and learners. Appointments with college staff who provide co-curricular programming are required. (3 lecture hours)

Prerequisite: Corequisite of Designated ALP section of ENGLI 1101; must be enrolled in linked section taught by same instructor.

ENGLI 1060***Reading & Writing in the Disciplines***

1 Credit Hour

Students will practice reading strategies and writing techniques that help them be successful in a specific discipline at the college level. Assignments will be based on content-area course materials. A specific content-area course must be identified as the focus for this course. This course may be taken four times for credit. (1 lecture hour)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1070***ESL Composition Supplement***

1 Credit Hour

Allows students who are currently enrolled in a composition course to identify areas of writing development that will help them succeed in their course. Focuses on the writing process, grammar, and vocabulary. Designed for students whose first or primary language is not English. This course may be taken four times for credit. (1 lecture hour)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1101 (C1 900)***English Composition I***

3 Credit Hours

Introduces key concepts in rhetoric and writing, including situation and context, audience, genre, purpose, and persuasion. Students apply these concepts in writing projects that demonstrate how reading and writing are embedded in multi-faceted academic, personal, social, political, and/or professional purposes. These writing projects unfold through a deliberate process of inquiry, feedback, and revision. (3 lecture hours)

Prerequisite: ENGLI 0492 with a grade of C or better, or equivalent or ENGLI 0493 with a grade of C or better, or equivalent or ELS 0553 with a grade of C or better, or equivalent, or appropriate writing placement category, or co-requisite of ENGLI 0493 (must be enrolled in linked section taught by the same instructor - these are defined pairs). Course requires Reading Placement Category One.

Course types: General Education: Written Communication (A.A.S., A.G.S.)

ENGLI 1102 (C1 901R)***English Composition II***

3 Credit Hours

Builds upon the rhetoric, reading, and writing concepts introduced in English Composition I by having students compose inquiry-driven research projects. In their research process, students find and select the most appropriate sources to address research questions that are intended for a discourse community. Students integrate sources meaningfully for support and present their findings via the forms of media and genre that suit the project's objectives. (3 lecture hours)

Prerequisite: ENGLI 1101 with a grade of C or better.

Course types: General Education: Written Communication (A.A.S., A.G.S.)

ENGLI 1105***Workplace Writing***

3 Credit Hours

Course focuses on the processes and strategies for creating various modes of communication within a workplace setting. Students will gain skills in assessing and addressing various audiences, observing stylistic conventions, and using appropriate elements of document design to communicate effectively. The course emphasizes the preparation of a variety of documents, such as resumes, letters of application, internal and external correspondence, descriptions, proposals, summaries, and reports. It also introduces strategies for conducting research and observing copyright. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

Course types: General Education: Written Communication (A.A.S., A.G.S.)

ENGLI 1110***Technical Writing***

3 Credit Hours

An introduction to technical writing with an overview of key issues such as usability, audience analysis, designing pages and digital screens, effective collaboration with peers, researching, interpreting and ethically presenting data, and writing clearly and persuasively. Also includes instruction in writing, revising, and presenting common technical writing genres, which could include emails, instructions, tutorials, manuals, reports, product/process descriptions, proposals, and presentations using visual aids. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 1115***Digital Writing***

3 Credit Hours

Students will be introduced to writing in digital environments. They will examine principles and practices, as well as pertinent digital writing issues, including but not limited to: accessibility, ownership, and ethics regarding the digital world. Through hands-on experience with digital tools used in academic and industry settings, students will learn and then apply rhetorical theory to write in diverse digital rhetorical situations. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 1125***Linguistics***

3 Credit Hours

The first course in the scientific study of language. Includes a systematic analysis of word formation, syntax and semantics in the English language and a study of the often universal ways that humans make meaning through language. Also includes study of related issues of language variation, particularly historical development and child language acquisition. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

ENGLI 1130 (H3 900)***Introduction to Literature***

3 Credit Hours

Introduces students to the artistic complexity, depth, and nuance of literature and develops the important skills of critical thinking and effective communication. Students analyze literary works from diverse historical, cultural, and literary contexts to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine literature with reference to how publication and reception influence literary works at the time of publication and beyond. Students explore how literature can reflect, but also challenge, cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1135 (F2 908)***Introduction to Film Art***

3 Credit Hours

Introduces the basic elements of film as an art form, including cinematography, mise-en-scene, movement, editing, and sound. Social and media contexts of film will also be considered. Through screening, discussion, and critical evaluation of selected films, students develop an ability to interpret cinema through close examination of the relationship between its form and content. Credit cannot be earned for both ENGLI 1135 and MPTV 1135. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

ENGLI 1145 (F2 909)**Film History**

3 Credit Hours

Explores the history of film through articulating the evolution of cinema from its inception to the modern era, with emphasis placed on social, historical, and economic contexts that shape changes in film. Through examining a variety of American and international films representing many eras, genres, and filmmakers, students will gain insight into the historical narratives that have shaped film as a mass medium. Credit cannot be earned for both ENGLI 1145 and MPTV 1145. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

ENGLI 1150 (H3 901)**Short Fiction**

3 Credit Hours

Introduces students to short fiction's artistic complexity, unique formal elements, depth, and nuance and develops the important skills of critical thinking and effective communication. Students study short fiction from diverse historical, cultural, and literary contexts to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine short fiction with reference to how publication and reception influence literary works at the time of publication and beyond. Students explore how individual works of short fiction can reflect, but also challenge, cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1151 (H3 901)**Novel**

3 Credit Hours

Introduces students to the artistic complexity, unique formal elements, depth, and nuance of novels and develops the important skills of critical thinking and effective communication. Students analyze novels from diverse historical, cultural, and literary contexts to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine novels with reference to how publication and reception influence literary works at the time of publication and beyond. Students explore how novels can reflect, but also challenge, cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1152 (H3 903)**Poetry**

3 Credit Hours

Introduces students to the artistic complexity, unique formal elements, depth, and nuance of poetry and develops the important skills of critical thinking and effective communication. Students analyze poetry from diverse historical, cultural, and literary contexts to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice analysis and argumentation. Students examine poetry with reference to how publication and reception influence poetic works at the time of publication and beyond. Students explore how poetry can reflect but also challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1153 (H3 902)**Drama**

3 Credit Hours

Introduces students to the artistic complexity, unique formal elements, depth, and nuance of drama and develops the important skills of critical thinking and effective communication. Students analyze drama from diverse historical, cultural, and literary contexts to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine drama with reference to how publication and reception influence literary works at the time of publication and beyond. Students explore how works of drama can reflect, but also challenge, cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1154 (HF 908)**Film As Literature**

3 Credit Hours

Explores the process of film adaptation from a variety of sources. Includes examination of films adapted directly and indirectly from prior media, as well as an overview of theoretical approaches to studying film adaptation. Through close study of selected films, students will develop a nuanced, open approach to considering the process of adaptation on screen. Credit cannot be earned for both ENGLI 1154 and MPTV 1154. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1156***Science Fiction***

3 Credit Hours

Introduces students to the artistic complexity, depth, and nuance of science fiction and develops the important skills of critical thinking and effective communication. Students study science fiction from diverse historical, cultural, and literary contexts to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine science fiction with reference to how publication and reception influence works at the time of publication and beyond. Students explore how science fiction can reflect, but also challenge, cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1157 (H3 918)***Children's Literature***

3 Credit Hours

Introduces students to the artistic qualities of literature for children and adolescents to develop students' critical thinking and effective communication skills. Students study children's literature and adolescent literature from diverse historical, cultural, and literary contexts, in order to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis of works from many genres of children's literature and adolescent literature and they consider the relationship between literacy and literature. Students examine literature both for children and adolescents with reference to how creation, publication, and reception influence those works at the time of creation and beyond. Students also explore how children's literature and adolescent literature can reflect, but also challenge, social norms, especially how children's literature and adolescent literature reflects and shapes any culture's understanding of children and childhood. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1158 (H5 901)***Bible As Literature***

3 Credit Hours

Introduces students to the artistic complexity, depth, and nuance of the Bible as literature to develop the important skills of critical thinking and effective communication. Students analyze the Bible as literature reflecting diverse historical, cultural, and literary contexts, building students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading of the Bible as literature, students practice literary analysis and argumentation. Students examine the Bible as literature with reference to how production, publication, dissemination, and reception have influenced it over time. Students explore how the Bible as literature not only reflects but also challenges cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1159 (H9 901)***Greek Mythology***

3 Credit Hours

Introduces students to the artistic complexity, unique formal elements, depth, and cultural relevance of Greek mythology as represented in both Classical and contemporary literature. Students develop critical thinking and effective communication skills. Students build cultural awareness and capacity for ethical and socially responsible reasoning by considering Greek mythology. Students explore how works of Greek mythology can reflect but also challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1160 (H3 910D)***Native American Literature***

3 Credit Hours

Introduces students to Native American mythology, oratory, poetry, short fiction, nonfiction, and novel literature from diverse historical, cultural, and literary contexts. Students develop the important skills of critical thinking and effective communication. Students analyze Native American literature to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine Native American literature with reference to how publication and reception influence literary works at the time of publication and beyond. Students explore how individual works of Native American literature can reflect, but also challenge, cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ENGLI 1161 (H3 910D)***Multicultural Literatures of the U.S.***

3 Credit Hours

Focuses on literary texts reflecting the experiences of marginalized communities in the U.S. Students explore literary works from diverse historical, cultural, and literary contexts for their artistic complexity, unique formal elements, depth, and nuance. Students develop the important skills of critical thinking and effective communication, and they build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine multicultural literature with reference to how publication and reception influence literary works at the time of publication and beyond. Students explore how individual works of multicultural literature can reflect, but also challenge, cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ENGLI 1165 (H3 911D)***Literature, Gender, and Sexualities***

3 Credit Hours

Surveys literature focusing on narratives, experiences, and theories of gender and sexualities. Students develop the important skills of critical thinking and effective communication. Students study literature from diverse historical, cultural, and literary contexts to build cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine limitations of the discipline and literary canonization from interdisciplinary and culturally inclusive perspectives. Students examine works with reference to how publication and reception influence literary works at the time of publication and beyond. Students explore how individual works of literature can reflect, but also challenge, cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

ENGLI 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit. (1 to 3 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1820***Selected Topics I***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1824***Selected Topics in English***

2 Credit Hours

Introductory exploration and analysis of selected topics in English with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One. Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2100***Writing Center Theory and Practice***

3 Credit Hours

Experiential course designed to prepare students for writing center work through instruction in writing center theory and practice. Includes writing; observing sessions in the Writing, Reading, Speech Assistance area; tutoring; and self-reflecting on writing and research experiences. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 2105***Writing in the Professions***

3 Credit Hours

An in-depth study of writing in the professions, exploring the structure and format of professional writing documents and how these documents function as a communicative tool. Provides a solid foundation upon which students can build as they develop specializations in their professional fields. Special attention will be paid to the rhetoric of professional writing and professional writing issues in professional settings. Includes instruction in rhetoric, research, and writing professional documents such as reports, proposals, and presentations. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 2110***Editing in the Professions***

3 Credit Hours

Equips students with basic editing skills that will help in future editing experiences, such as advanced classes, their own writing and editing projects, internships, and employment. Introduces students to the roles and responsibilities of editors, including how they interact with others during production and use strategies for efficient editing processes. Develops understanding of basic copyediting skills, including editing for clarity, accuracy, consistency, completeness, and appropriateness for the intended audience. Emphasizes flexibility in applying style and usage requirements, depending on the rhetorical situation. Develops ability to use and apply style guides, style sheets, and copyediting symbols, and technologies central to modern publishing. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 2115***Writing for Nonprofits***

3 Credit Hours

An in-depth study of the content, form, and function of the professional writing used in community organizations. Provides a solid foundation for students currently working or planning on working at a community organization. Special attention will be paid to public rhetoric for the purposes of communicating the missions of the community organization, such as attaining grants, fundraising, and establishing goodwill in the community. Includes instruction in rhetoric, research, and writing professional texts, such as grants, reports, proposals, advertisements, research requests, and presentations. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 2126***Modern English Grammar***

3 Credit Hours

A systematic and rigorous survey of the structure of contemporary English. Also explored are usage issues (including problems with the sentence, punctuation and agreement) and their underlying sources (language change, language attitudes, and the notion of Standard English). Traces the effects of stylistic, regional and social variation on English usage. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2200***Argumentative Writing***

3 Credit Hours

A study of the written argument, an essential form of communication circulating everywhere today, in print and on screens, to clarify ideas, form consensus, promote values, and gain political and social power. Students will read rhetorical theorists and analyze written arguments before crafting and circulating their own written arguments. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 2210***Creating a Literary Journal: Prairie Light Review***

3 Credit Hours

An experiential course to produce a college district literary arts journal, applying editorial, production, and publication techniques. Topics include acquisitions, copy editing, layout design, and marketing aspects of publishing. (3 lecture hours)

Prerequisite: Course requires reading placement category one.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2220 (H3 912)***British Literature to 1800***

3 Credit Hours

A survey of works illustrating the development of British literature from Old English and Middle English to 1800. Individual works are analyzed for artistic complexity, depth, and nuance as students refine critical thinking and effective communication skills. Diverse literary works from the British tradition up to 1800 will be studied to build students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine British literature with reference to how conditions of production/publication, dissemination, and reception influence literary works and for how literary traditions and/or movements are formed and how they change. Students explore how literature from this time period can reflect but also challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2221 (H3 913)***British Literature From 1800 Through The Present***

3 Credit Hours

A survey of works illustrating the development of British literature from roughly 1800 to the present. Individual works are analyzed for artistic complexity, depth, and nuance as students refine critical thinking and effective communication skills. Diverse literary works from the British tradition from roughly 1800 to the present will be studied to build students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine British literature with reference to how publication and reception influence literary works and for how literary traditions and/or movements are formed and how they change. Students explore how literature from this time period can reflect but also challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2223 (H3 914)***American Literature From the Colonial Period to the Civil War***

3 Credit Hours

A survey of works illustrating the development of American literature from its beginnings up to the Civil War. Individual works are analyzed for artistic complexity, depth, and nuance as students refine critical thinking and effective communication skills. Diverse literary works from the beginnings of the American literary tradition up to the Civil War will be studied to build students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine American literature with reference to how publication and reception influence literary works and for how literary traditions and/or movements are formed and how they change. Students explore how literature from this time period can reflect but also challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2224 (H3 915)***American Literature From the Civil War to the Present***

3 Credit Hours

A survey of works illustrating the development of American literature from the Civil War to the present. Individual works are analyzed for artistic complexity, depth, and nuance as students refine critical thinking and effective communication skills. Diverse literary works from the post-Civil War American tradition will be studied to build students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine American literature with reference to how publication and reception influence literary works and for how literary traditions and/or movements are formed and how they change. Students explore how literature from this time period can reflect but also challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2226 (H3 907)***World Literature***

3 Credit Hours

A survey of world literature. Individual works are analyzed for artistic complexity, depth, and nuance as students refine critical thinking and effective communication skills. Diverse literary works from various literary traditions will be studied to build students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine texts from cultures around the world and different time periods with reference to how publication and reception influence literary works at the time of publication and beyond and for how literary traditions and/or movements are formed and change. Students explore how texts of world literature reflect but also challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2227 (H3 907)***Modern European Literature***

3 Credit Hours

A survey of modern European literary works illustrating the development of national and continental Modernist literary and cultural movements. Individual works are analyzed for artistic complexity, depth, and nuance as students refine critical thinking and effective communication skills. Diverse modern European literary works will be studied to build students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine modern European literature with reference to how publication and reception influence literary works and for how literary traditions and/or movements are formed and how they change. Students explore how literature from this time period can reflect but also challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2228 (H3 905)***Shakespeare***

3 Credit Hours

Study of the prolific career of Shakespeare and of his various works, including multiple plays and poetry. Individual works are analyzed for artistic complexity, depth, and nuance as students refine critical thinking and effective communication skills. Shakespeare's works are considered in reference to Renaissance life and thought and for how they have endured through time. Study of Shakespearean works and an understanding of the nature of dramatic art builds students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students also practice literary analysis and argumentation. Students examine Shakespeare with reference to how publication, performance, and reception influence literary works and for how literary traditions and/or movements are formed and how they change over time. Students explore how works by Shakespeare can create, reflect, and challenge cultural, social, and literary norms. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2234***Film Directors and Authorship***

3 Credit Hours

Focuses on the study of film through examination of the film director and authorship. Studies of one or more directors, authorship theory, and critical dialogue about the concept of authorship and responses to the work of directors will all be covered. Director-focused content will be chosen by the instructor. Credit cannot be earned for both ENGLI 2234 and MPTV 2234. (3 lecture hours)

Prerequisite: ENGLI 1135 with a grade of C or better, or ENGLI 1145 with a grade of C or better, or ENGLI 1154 with a grade of C or better, or equivalent or consent of instructor.

ENGLI 2235***Film Genres***

3 Credit Hours

Focuses on the study of film through examination of cinematic genre. Studies of one or more genres, genre theory, critical dialogue about the concept of genre and its limitations will all be covered. Genre-focused content will be chosen by the instructor. Credit cannot be earned for both ENGLI 2235 and MPTV 2235. (3 lecture hours)

Prerequisite: ENGLI 1135 with a grade of C or better, or ENGLI 1145 with a grade of C or better, or ENGLI 1154 with a grade of C or better, or equivalent or consent of instructor.

ENGLI 2236***World Cinema***

3 Credit Hours

Explores international cinema, primarily emphasizing films made in countries other than the United States. Studies of the cinema of one or more nations, concepts of national cinematic identity, critical dialogue, history, and important filmmakers of diverse backgrounds will all be covered. International cinema content will be chosen by the instructor. Credit cannot be earned for both ENGLI 2236 and MPTV 2236. (3 lecture hours)

Prerequisite: ENGLI 1135 with a grade of C or better, or ENGLI 1145 with a grade of C or better, or ENGLI 1154 with a grade of C or better, or equivalent or consent of instructor.

ENGLI 2237***Documentary Cinema***

3 Credit Hours

Explores documentary cinema that fulfills a variety of cinematic purposes which may include argumentative, profile, essay, historical, and/or nature. Studies of multiple documentary styles, documentary filmmakers, critical dialogue, history, and spectatorship will all be covered. Documentary cinema content will be chosen by the instructor. Credit cannot be earned for both ENGLI 2237 and MPTV 2237. (3 lecture hours)

Prerequisite: ENGLI 1135 with a grade of C or better, or ENGLI 1145 with a grade of C or better, or ENGLI 1154 with a grade of C or better, or equivalent or consent of instructor.

ENGLI 2238***Longform Television***

3 Credit Hours

Explores longform narrative television, whether comedic or dramatic, as a multifaceted, sustained storytelling medium. Studies of one or more narrative television series, creators, critical dialogue, history, and spectatorship will all be covered. Longform television content will be chosen by the instructor. Credit cannot be earned for both ENGLI 2238 and MPTV 2238. (3 lecture hours)

Prerequisite: ENGLI 1135 with a grade of C or better, or ENGLI 1145 with a grade of C or better, or ENGLI 1154 with a grade of C or better, or equivalent or consent of instructor.

ENGLI 2239***Identity and Film***

3 Credit Hours

Explores the multifaceted relationship between films and various elements of identity, such as race, socioeconomic status, gender, sexuality, disability, and nationality. In addition to conducting textual analysis of films, coursework will include examination of film history, film production, audience reception, and critical response as a means to critically probe how films shape and are shaped by identity and culture. (3 lecture hours)

Prerequisite: ENGLI 1135/MPTV 1135 with a grade of C or better, or ENGLI 1145/MPTV 1145 with a grade of C or better, or ENGLI 1154/MPTV 1154 with a grade of C or better, or consent of instructor.

ENGLI 2250***Introduction to Creative Writing***

3 Credit Hours

Students discover and develop their writing talent in several genres, including fiction, poetry, creative nonfiction, and dramatic writing. Emphasis is on the workshop model in which students provide and receive input on works written for class. This course emphasizes the craft of writing with attention to brainstorming, drafting, and revising as important stages of the writing process. Through analysis of published works, and the production of their own original works, students learn to use language creatively to achieve desired effects. They further consider how intention and audience guide creative choices. Students will explore how creative writing allows for the expression of many multicultural perspectives and how creative works help writers and readers to learn about themselves and the world around them. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2251***Fiction Writing***

3 Credit Hours

Students discover and develop their fiction writing talent. Emphasis is on the workshop model in which students provide and receive input on fiction written for class. This course emphasizes the craft of fiction writing with attention to brainstorming, drafting, and revising as important stages of the writing process. Through analysis of published works of fiction, and the production of their own original works of fiction, students learn to use language creatively to achieve desired effects. They further consider how intention and audience guide creative choices. Students will explore how fiction writing allows for the expression of many multicultural perspectives and how creative works help writers and readers to learn about themselves and the world around them. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2252***Poetry Writing***

3 Credit Hours

Students discover and develop their talent as poets, working in a variety of poetic forms and styles. Emphasis is on the workshop model in which students provide and receive input on poems written for class. This course emphasizes the craft of writing with attention to brainstorming, drafting, and revising as important stages of the writing process. Through analysis of published poems, and the production of their own original poetry, students learn to use language creatively to achieve desired effects. They further consider how intention and audience guide creative choices. Students will explore how poetry allows for the expression of many multicultural perspectives and how poetry helps writers and readers to learn about themselves and the world around them. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2253***Creative Nonfiction Writing***

3 Credit Hours

Students discover and develop their writing talent in creative nonfiction. Emphasis is on the workshop model in which students provide and receive input on creative nonfiction written for class. This course emphasizes the craft of writing with attention to brainstorming, drafting, and revising as important stages of the writing process. Through analysis of published creative nonfiction, and the production of their own original creative nonfiction, students learn to use language creatively to achieve desired effects. They further consider how intention and audience guide creative choices. Students will explore how writing and reading creative nonfiction allows for the expression of many multicultural perspectives and how creative nonfiction helps writers and readers to learn about themselves and the world around them. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2254***Playwriting***

3 Credit Hours

Introduces students to invention, criticism, and revision strategies that will encourage them to discover and develop their own voice and style in drama. Students write their own dramatic pieces, learn industry standards for play formats, experiment with various forms and styles, criticize and revise their own work, and receive critical feedback from others. Students read and examine the works of well-known playwrights for insight and inspiration. (3 lecture hours)

ENGLI 2255***Screenwriting for Short Forms***

3 Credit Hours

This writing course will engage students with invention, criticism, and revision strategies that will encourage them to discover and develop their own voice and style in screenwriting. Students write individual, isolated scenes and acts for various forms of screen formats; learn industry standards for screenplay formats; experiment with various forms and styles; criticize and revise their own work; receive critical feedback from others; and read and examine the works of well-known screenwriters for insight and inspiration. Credit cannot be given for both ENGLI 2255 and MPTV 2022. (3 lecture hours)

ENGLI 2261***Writing for Publication***

3 Credit Hours

This course teaches students how to analyze publishing markets and how to understand important aspects of publication, including query letters, agents, manuscript preparation, and marketing/promotion. As part of learning about how to publish creative work, students also hone their craft as creative writers, learning to use language creatively to achieve desired effects while considering how intention and audience guide creative choices. Students produce original work that is intended for particular publishing outlets. In developing original work for publication, students learn how creative writing allows for the expression of many multicultural perspectives and how creative works help writers and readers to learn about themselves and the world around them. (3 lecture hours)

Prerequisite: ENGLI 2210, ENGLI 2250, ENGLI 2251, ENGLI 2252, or ENGLI 2253 with a grade of C or better, or consent of instructor. Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2262 (H3 908N)***Non-Western Literature***

3 Credit Hours

A survey of literature that represents Non-Western cultures, authors, and themes. Individual works are analyzed for artistic complexity, depth, and nuance as students refine critical thinking and effective communication skills. Diverse literary works from various Non-Western literary traditions will be studied to build students' cultural awareness and capacity for ethical and socially responsible reasoning. Through close reading, students practice literary analysis and argumentation. Students examine texts from literary traditions outside the Western canon with reference to how publication and reception influence literary works at the time of publication and beyond, how their literary tradition determines their status in Western cultures, and how literary traditions and/or movements are formed and change. Students explore how literature reflects but also challenges cultural, social, and literary norms of the culture in which it is written as well as of Western cultures. Students identify the problematic term Non-Western as a false binary between the West and the rest of the world and the oversimplification and generalization of this genre. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ENGLI 2300***Advanced Composition***

3 Credit Hours

Builds upon the rhetoric and writing skills developed in Composition I and II. Students will study and apply rhetorical theory, from the classical through the postmodern periods, in order to read and write within a variety of rhetorical situations. They will also investigate and incorporate research methodologies and prose styles used in different academic and professional discourse communities. Students will create a portfolio of work tailored to their academic and professional goals, which will include multimodal elements. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 2400**ePortfolio**

1 Credit Hour

A culminating course on ePortfolios for students graduating with the Writing Studies' Professional Writing Certificate. The course focuses on students designing an ePortfolio for their particular academic or professional needs. Students will select and reflect upon written artifacts from their coursework that represent their learning as well as build, revise, and edit a comprehensive portfolio that represents themselves as professional writers and rhetoricians. (1 lecture hour)

Prerequisite: Course requires Reading Placement Category One and Writing Placement Category One.

ENGLI 2800**Special Project**

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline, while building upon academic knowledge and skills acquired in introductory-level classes. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) (1 to 3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2820**Topics in Literature**

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken three times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2860**Internship (Career & Technical Ed)**

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2863**Internship (Career & Technical Ed)**

3 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 225 clock hours for three semester credit hours. (15 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2865**Internship Advanced (Career & Tech Ed)**

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ENGLI 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

English Language Acquisition (ELA)

ELA 0950***ESL Literacy I***

1-6 Credit Hours

Introduces basic ESL Literacy communication skills including listening, speaking, reading, and writing. Emphasis is on aural/oral skills. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (1 to 6 lecture hours)

Prerequisite: Consent of instructor is required.

ELA 0951***ESL Literacy II***

1-6 Credit Hours

Completes basic ESL Literacy communication skills including listening, speaking, reading, and writing. Emphasis is on aural/oral skills. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (1 to 6 lecture hours)

Prerequisite: Consent of instructor is required.

ELA 0952***Low Beginning ESL***

1-6 Credit Hours

Introduces beginning ESL communication skills, including listening, speaking, reading and writing. Grammar concepts introduced. Emphasis continues on aural/oral skills. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (1 to 6 lecture hours)

Prerequisite: Consent of instructor is required.

ELA 0953***High Beginning ESL***

1-6 Credit Hours

Continues Beginning ESL communication skills including expanded basic listening, speaking, reading and writing. Continues the study of grammar and structure. Emphasis primarily on aural/oral skills. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass fail basis. (1 to 6 lecture hours)

Prerequisite: Consent of instructor is required.

ELA 0954***Beginning ESL III***

1-5 Credit Hours

Completes beginning ESL communication skills necessary to function in the United States. Continues the development of listening, speaking, reading and writing skills. Introduces grammar and structure. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (1 to 5 lecture hours)

Prerequisite: Consent of instructor is required.

ELA 0955***Low Intermediate ESL***

1-6 Credit Hours

Introduces Intermediate ESL communication skills necessary to function in the U.S. including listening, speaking, reading and writing. Continues the study of grammar and structure. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This class can only be taken on a pass/fail basis. (1 to 6 lecture hours)

Prerequisite: Consent of instructor is required.

ELA 0956***High Intermediate ESL***

1-6 Credit Hours

Completes Intermediate ESL communication skills necessary to function in the U.S. including listening, speaking, reading, and writing. Continues the study of grammar and structure. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This class can only be taken on a pass/fail basis. (1 to 6 lecture hours)

Prerequisite: Consent of instructor is required.

ELA 0957***Advanced ESL I***

1-5 Credit Hours

Introduces advanced ESL communication skills necessary to function in the United States, including listening, speaking, reading and writing. Continues the study of grammar and structure. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (1 to 5 lecture hours)

Prerequisite: Consent of instructor is required.

ELA 0958***Advanced ESL II***

1-5 Credit Hours

Completes advanced ESL communication skills necessary to function in the United States, including listening, speaking, reading and writing. Continues the study of grammar and structure. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (1 to 5 lecture hours)

Prerequisite: Consent of instructor is required.

English Language Studies (ELS)

ELS 0301***English Language Fluency 3***

3 Credit Hours

Builds English language fluency through extensive reading, writing, listening and speaking on a single theme. Increases comprehension of adapted readings and listenings at the intermediate level. Promotes interactive communication through reflective journaling and class discussions. Includes the noticing and usage of grammatical structures and common forms of pronunciation. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (3 lecture hours)

Prerequisite: Appropriate score on placement measure.

ELS 0302***English Language for Argument and Analysis 3***

3 Credit Hours

Establishes a foundation for argument and analysis through written and oral storytelling at the intermediate level. Encourages students to use stories to deepen language learning, to argue a point, and to analyze discipline-based content. Focuses on acquiring vocabulary that engages an audience. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (3 lecture hours)

Prerequisite: Appropriate score on placement measure.

ELS 0303***English for Academic Success 3***

4 Credit Hours

Increases English proficiency by exposure to a range of adapted materials at the intermediate level. Improves comprehension of adapted cross-disciplinary listenings and readings through the application of listening and reading strategies. Presents corpus-based, high-frequency academic vocabulary. Focuses on producing multimodal assignments for a variety of purposes and audiences. Includes strategies for completing assignments and for communicating with instructors or supervisors. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (4 lecture hours)

Prerequisite: Appropriate score on placement measure.

ELS 0333***English Language for Academic Success***

2-4 Credit Hours

Focuses on academic and professional English skills for students whose first or primary language is not English. Emphasizes critical thinking in reading, writing, listening, and speaking. Develops language and research skills necessary for success in the academic or professional setting. Intended for students who hold a high school certificate or its equivalent and have previously studied English. This course may be taken up to three times for credit; course does not count toward graduation. (2 to 4 lecture hours)

Prerequisite: Appropriate scores on mandatory placement tests or consent of instructor.

ELS 0401***English Language Fluency 4***

3 Credit Hours

Builds English language fluency through extensive reading, writing, listening and speaking on a single theme. Increases comprehension of adapted readings and listenings at the advanced level. Promotes interactive communication through reflective journaling and class discussions. Includes the noticing and usage of grammatical structures and common forms of pronunciation. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (3 lecture hours)

Prerequisite: ELS 0301 or ELS 0441 with a C or better, satisfactory completion of ELA 0958, or appropriate score on placement measure.

ELS 0402***English Language for Argument and Analysis 4***

3 Credit Hours

Focuses on effective language components needed for argument and analysis. Emphasizes communicative competence for situations where there are fewer opportunities to negotiate meaning. Assists students in finding, evaluating and synthesizing adapted written and oral sources, in order to produce compositions and presentations at the high-intermediate/low advanced level. In particular, contrasts research methods of summarizing, paraphrasing, and citing sources in the United States versus their country of origin. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (3 lecture hours)

Prerequisite: ELS 0302 or ELS 0771 with a C or better, satisfactory completion of ELA 0958, or appropriate score on placement measure.

ELS 0403***English for Academic Success 4***

4 Credit Hours

Increases English proficiency by exposure to a range of adapted cross-disciplinary materials at the advanced level. Improves comprehension of adapted cross-disciplinary listenings and readings through the application of listening and reading strategies. Presents corpus-based, high-frequency academic vocabulary. Focuses on producing multimodal assignments for a variety of purposes and audiences. Includes strategies for completing assignments and for communicating with instructors or supervisors. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (4 lecture hours)

Prerequisite: ELS 0303 or ELS 0551 with a C or better, satisfactory completion of ELA 0958, or appropriate score on placement measure.

ELS 0441***Academic Reading I***

3-4 Credit Hours

Develops academic and professional English language and reading proficiency at the low-intermediate level for students whose first or primary language is not English. Emphasizes critical reading, vocabulary development, speaking fluency, intercultural interaction competence, as well as professional and academic success skills. Intended for students who hold at least a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken three times for credit; course does not count toward GPA/graduation and is non-transferable. Taking this course as a three-credit course is only available for students who co-enroll in two English Language Studies courses that have been designated as a cohort. This course may be taken three times for credit; course does not count toward GPA/graduation and is non transferable. (3 to 4 lecture hours)

Prerequisite: Appropriate score(s) on the placement test(s) or equivalent or consent of instructor.

ELS 0442***Academic Reading II***

3-4 Credit Hours

Develops academic and professional English language and reading proficiency at the high-intermediate level for students whose first or primary language is not English. Emphasizes critical reading, vocabulary development, speaking fluency, intercultural interaction competence, as well as professional and academic success skills. Intended for students who hold at least a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken three times for credit; course does not count toward GPA/graduation and is non-transferable. Taking this course as a three-credit course is only available for students who co-enroll in two English Language Studies courses that have been designated as a cohort. This course may be taken three times for credit; course does not count toward GPA/graduation and is non-transferable. (3 to 4 lecture hours)

Prerequisite: ELS 0441 with a grade of C or better, or equivalent or appropriate score(s) on the placement test(s).

ELS 0443***Academic Reading III***

3-4 Credit Hours

Develops academic and professional English language and reading proficiency at the advanced-level for students whose first or primary language is not English. Emphasizes critical reading, vocabulary development, speaking fluency, intercultural interaction competence, as well as professional and academic success skills. Intended for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. A grade of C or better in this course and fulfillment of the listening requirement will place the student in Reading Category 1. This course may be taken three times for credit; course does not count toward GPA/graduation and is non-transferable. Taking this course as a three-credit course is only available for students who co-enroll in two English Language Studies courses that have been designated as a cohort. (3 to 4 lecture hours)

Prerequisite: ELS 0442 with a grade of C or better, or equivalent or appropriate score(s) on the placement test(s).

ELS 0501***English Language Fluency 5***

3 Credit Hours

Builds English language fluency through extensive reading, writing, listening and speaking on a single theme. Increases comprehension of college-level readings and listenings through scaffolded support. Promotes interactive communication through reflective journaling and class discussions. Includes the noticing and practice of grammatical structures and common forms of pronunciation. Encourages students to become independent language learners. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (3 lecture hours)

Prerequisite: ELS 0401 or ELS 0442 with a C or better, or appropriate score on placement measure.

ELS 0502***English Language for Argument and Analysis 5***

3 Credit Hours

Focuses on effective language components needed for argument and analysis. Emphasizes communicative competence for situations where there are fewer opportunities to negotiate meaning. Assists students in finding, evaluating, and synthesizing authentic written and oral academic sources, in order to produce supported compositions and presentations at the high-advanced level. In particular, contrasts research methods of summarizing, paraphrasing, and citing sources in the United States versus their country of origin. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (3 lecture hours)

Prerequisite: ELS 0402 or ELS 0772 with a C or better, or appropriate score on placement measure.

ELS 0503***English for Academic Success 5***

4 Credit Hours

Increases English proficiency through exposure to a range of college-level materials across the curriculum. Improves comprehension of cross-disciplinary lectures and textbooks through the application of listening and reading strategies. Presents corpus-based, high-frequency academic and work-related vocabulary. Focuses on producing multimodal assignments for a variety of purposes and audiences. Includes strategies for completing assignments and communicating with instructors or supervisors. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (4 lecture hours)

Prerequisite: ELS 0403 or ELS 0552 with a C or better, or appropriate score on placement measure.

ELS 0551***Academic ESL Writing I***

4 Credit Hours

Beginning-level academic/professional writing skills for students whose first or primary language is not English. Emphasizes writing well-formed, grammatical sentences and studying paragraph development. Focuses on recognizing spelling patterns for verbs and nouns, expanding vocabulary, generating original sentences in the six basic sentence patterns with correct punctuation, distinguishing topic sentences from supporting ideas and concluding sentences, and learning pre-writing techniques for paragraph development. Intended for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: Appropriate score on mandatory placement test.

ELS 0552***Academic ESL Writing II***

4 Credit Hours

Intermediate-level academic/professional writing skills for students whose first or primary language is not English. Emphasizes writing well-formed, grammatical paragraphs. Focuses on expanding the six basic sentence patterns through modification and compounding, using the writing process, organizing ideas into paragraph form, understanding elements of unity and coherence, and producing narrative, descriptive and expository paragraphs. Intended for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: ELS 0551 with a grade of C or better, or equivalent or appropriate score on mandatory placement test.

ELS 0553***Academic ESL Writing III***

4 Credit Hours

Advanced-level academic/professional writing skills for students whose first or primary language is not English. Emphasizes writing well-formed, grammatical essays. Focuses on a review of sentence expansion and modification, the four steps of the writing process, developing research skills, and writing essays in a variety of rhetorical styles. Intended for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: ELS 0552 with a grade of C or better, or equivalent or appropriate score on mandatory placement test.

ELS 0661***Academic ESL Grammar I***

4 Credit Hours

Beginning-level academic/professional English grammar and sentence structure for students whose first or primary language is not English. Emphasizes the formal properties of the English language integrated with writing skills. Focuses on identifying sentence parts, complete sentences and fragments; subject/verb agreement; basic statement, imperative and question patterns; and simple present, present continuous, simple past and past continuous tenses. Intended primarily for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: Appropriate score on mandatory placement test.

ELS 0662***Academic ESL Grammar II***

4 Credit Hours

Intermediate-level academic/professional English grammar and sentence structure for students whose first or primary language is not English. Emphasizes the formal properties of the English language integrated with writing skills. Focuses on the English system of articles, phrasal verbs, constructions of coordination and modification, and future and perfect tenses. Intended primarily for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: ELS 0661 with a grade of C or better, or equivalent or appropriate score on mandatory placement test.

ELS 0663***Academic ESL Grammar III***

4 Credit Hours

Advanced-level academic/professional English grammar and sentence structure for students whose first or primary language is not English. Emphasizes the formal properties of the English language integrated with writing skills. Focuses on conditionals, passive voice, reported speech, verbals, emphatic constructions, performing multiple coordinating and embedding combinations, and varying tenses in discourse. Intended primarily for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: ELS 0662 with a grade of C or better, or equivalent or appropriate score on mandatory placement test.

ELS 0771***Academic ESL Listening/Speaking I***

4 Credit Hours

Beginning-level academic/professional listening and speaking skills necessary for formal contexts for students whose first or primary language is not English. Emphasizes aural/oral discourse used in decision-making and problem-solving tasks. Focuses on such areas as listening to college lectures and taking notes, participating in group discussions, pronouncing English sounds correctly, producing English stress and intonation patterns, and preparing short oral presentations. Intended primarily for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: Appropriate score on mandatory placement test.

ELS 0772***Academic ESL Listening/Speaking II***

4 Credit Hours

Intermediate-level academic/professional listening and speaking skills necessary for more formal contexts for students whose first or primary language is not English. Emphasizes longer aural/oral discourse used in decision-making and problem-solving tasks. Focuses on areas such as listening to extended college lectures and taking notes, applying a range of strategies for participating in group discussions, pronouncing English sounds correctly, producing English stress and intonation patterns, and incorporating techniques to enhance oral presentations. Intended primarily for students who hold a high school certificate or its equivalent and who have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: ELS 0771 with a grade of C or better, or equivalent or appropriate score on mandatory placement test.

ELS 0773***Academic ESL Listening/Speaking III***

4 Credit Hours

Advanced-level listening and speaking skills and strategies for professional contexts for students whose first or primary language is not English. Emphasizes analytical skills necessary for assessing alternatives, finding creative solutions, and presenting outcomes effectively. Intended primarily for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (4 lecture hours)

Prerequisite: ELS 0772 with a grade of C or better, or equivalent or appropriate score on mandatory placement test.

ELS 0820***Selected Topics***

1-4 Credit Hours

Introductory exploration and analysis of selected topic(s) with a specific theme indicated by course title listed in college course schedule. This course may be taken up to three times for credit; course is non-transferable and does not count toward graduation. (1 to 4 lecture hours)

Prerequisite: Appropriate score on mandatory placement tests or consent of instructor.

ELS 0881***Academic ESL Language and Culture I***

2-4 Credit Hours

Beginning-level academic/professional aural/oral skills and strategies for students whose first or primary language is not English. Emphasizes developing the skills and strategies necessary for social conversations and formal transactions, building an understanding and appreciation of U.S. culture, and enhancing cross-cultural communication. Focuses on such areas as making introductions, initiating, sustaining and ending conversations, explaining personal tastes and preferences, and using the telephone. Addresses the linguistic and cultural instructional needs of non-English-language-background students. Intended primarily for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (2 to 4 lecture hours)

Prerequisite: Appropriate score on Listening and Speaking Placement test(s) or consent of instructor.

ELS 0882***Academic ESL Language and Culture II***

2-4 Credit Hours

Intermediate-level academic/professional aural/oral skills and strategies for students whose first or primary language is not English. Emphasizes open-ended and problem-solving tasks to generate original conversation within the context of real-life, authentic situations. Focuses on such areas as communicating cross-culturally; making suggestions, expressing feelings, making inquiries, offering/accepting invitations, gifts and apologies; explaining problems; and agreeing/disagreeing. Addresses the linguistic and cultural instructional needs of non-English-language-background students. Intended primarily for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. (2 to 4 lecture hours)

Prerequisite: ELS 0881 with a grade of C or better, or equivalent or appropriate score on Listening and Speaking placement test(s).

ELS 0883***Academic ESL Language and Culture III***

2-4 Credit Hours

Advanced-level academic/professional oral/aural skills and strategies for students whose first or primary language is not English. Emphasizes more complex transactions and conversation management skills in the context of decision-making and problem-solving tasks based on real-life, authentic situations. Focuses on such areas as communicating cross-culturally; agreeing, disagreeing and compromising; participating in discussions; explaining complex situations, and reporting sequences of events. Addresses the linguistic and cultural instructional needs of non-English-language-background students. Intended primarily for students who hold a high school certificate or its equivalent and have previously studied English in the United States or their native countries. May be taken up to three times for credit; course does not count toward GPA/graduation and is non-transferable. (2 to 4 lecture hours)

Prerequisite: ELS 0882 with a grade of C or better, or equivalent or appropriate score on Listening and Speaking Placement Test(s).

ELS 0884***Introduction to English Language Studies***

1 Credit Hour

First course to be taken in the English Language Studies class sequence. Introduces students to campus and language learning resources. Provides opportunities for students to demonstrate their current English language proficiency in reading, writing, listening, speaking, metalanguage, and vocabulary. Students will set language targets to achieve personal, academic, and/or professional goals. Intended for students whose first or primary language is not English, who have previously studied English, and who hold a high school certificate or its equivalent. May be taken up to three times for credit; course does not count toward graduation. (1 lecture hour)

Eye Care Assistant (EYE)

EYE 1101***Principles of Eye Care Assistant I***

8 Credit Hours

Students will be introduced to the profession of eye care assistant, including education on career options in optometry and ophthalmology. Concepts such as medical ethics, regulatory, and legal issues, communication skills, safety, general and ocular anatomy and physiology, ocular pharmacology, ocular microbiology, optics, and ocular history taking will be introduced. (5 lecture hours, 3 lab hours, 8 clinical hours)

Prerequisite: ANAT 1500 with a grade of C or better, or ANAT 1551 and ANAT 1552, both with a grade of C or better, or ANAT 1571 and ANAT 1572, both with a grade of C or better, or equivalent; and HLTH 1110 with a grade of C or better or equivalent.

EYE 1102***Principles of Eye Care Assistant II***

8 Credit Hours

Students will build upon the concepts learned in Eye Care Assistant I. Additionally, the role of the eye care assistant in ocular surgery will be emphasized. Teachings include other topics such as ocular imaging procedures, optometrist/ophthalmic photography and visual aids for the partially sighted. (5 lecture hours, 3 lab hours, 16 clinical hours)

Prerequisite: EYE 1101 with a grade of C or better, or equivalent.

EYE 1103***Principles of Eye Care Assistant III***

9 Credit Hours

Eye Care Assistant III will reinforce concepts and expand upon clinical experiences. Differentiation between blindness and partial blindness, impact of sight and potential reading problems in children, and tests used to evaluate vision will be presented. Preparation for the certification examination is included. (4 lecture hours, 3 lab hours, 16 clinical hours)

Prerequisite: EYE 1102 with a grade of C or better, or equivalent.

Fashion Studies (FASHI)

FASHI 1110***Machine Knitting I***

1.5 Credit Hours

Principles and techniques knitting on the single-bed knitting machine. Basic skills are introduced with emphasis on the creative use of color, pattern, texture and fibers in the production of knitted fabrics. (3 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 1111***Introduction to Machine Knitting***

3 Credit Hours

Principles and techniques for knitting on a single-bed knitting machine are introduced with emphasis on the creative use of color, pattern, texture, and fibers in the production of knitted fabrics. (6 lab hours)

FASHI 1112***Machine Knitting II***

1.5 Credit Hours

Intermediate and advanced techniques on knitting machines. Knit-weave, lace, jacquard, double bed techniques, garment design, and knitting software are introduced. (3 lab hours)

Prerequisite: FASHI 1110 or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 1114***Weaving I***

1.5 Credit Hours

Introduction to the loom as a tool for design and personal expression. Includes selecting yarns, making warps, dressing the loom, designing fabrics, and producing a variety of cloth structures. (3 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 1116***Weaving II***

1.5 Credit Hours

Development of intermediate and advanced weaving skills on the loom. Twill variations, double weave, lace weave, and overshot are introduced. (3 lab hours)

Prerequisite: FASHI 1114 or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 1180***Bus Practices - Fashion Entrepreneur***

3 Credit Hours

Fundamental decision making for the person in the business of sewing, arts or crafts, includes acquisition of equipment and supplies, legalities, taxes, zoning, insurance, establishing price structures, customer relations, record keeping, financing, trade publications, organizations, advertising and time scheduling. (3 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 1183***Felting and Fusing***

1.5 Credit Hours

Concepts and techniques related to dimensional felt-making through the study of felting fibers, their characteristics and manipulation as a fiber medium. Experimentation in contemporary fusing techniques. (3 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 1200***Beginning Clothing Construction***

3 Credit Hours

Introduction to sewing techniques used in the construction of clothing for personal use. Students will learn basic construction techniques, fabric and pattern selection, and adjusting patterns for fit based on body measurements. Students will construct garments using commercial patterns. This does not fulfill the FASHI 1201 Clothing Construction I requirement for a Fashion Design major. (6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

FASHI 1201***Clothing Construction I***

3 Credit Hours

Introduction to professional sewing techniques and apparel construction. Layout, cutting, marking, and finishing techniques are used to produce garments made from non-commercial patterns. Assembly of technique sample book is required. (6 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

FASHI 1202***Clothing Construction II***

3 Credit Hours

Advanced construction techniques across a series of garment types to produce prototypes using professional quality construction details and techniques. Addition of techniques to sample reference book is required. (6 lab hours)

Prerequisite: FASHI 1201 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 1210***Introduction to the Fashion Industry***

3 Credit Hours

Introductory course exploring the inner workings of the fashion industry. Study of the structure, key roles within it, and the cycle and process of fashion product development provides the foundation for further studies in more specialized areas of the fashion industry. (3 lecture hours)

FASHI 1301***Flat Pattern Drafting I***

3 Credit Hours

Introduction to flat pattern drafting. Students learn industry terminology, pattern drafting techniques and tool usage while manipulating slopers to create finished patterns. Original designs will be drafted and fit as a prototype. Students will create a set of slopers and blocks and a digital clipping file. (6 lab hours)

Prerequisite: FASHI 1201 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 1305***Design Concepts***

3 Credit Hours

Design process is introduced through exploration of principles and elements as they apply to fashion and the human form. Students discover ways to communicate ideas through different techniques. Role of research, color, markets, design exploration, and organization of work for portfolio are emphasized. Design journals are required in digital and book form. (2 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 1315***Fashion Illustration I***

3 Credit Hours

Introduction to fashion sketching techniques and poses that include female fashion figure front, 3/4 and back views. A variety of rendering techniques, flats, floats and design details will be covered. Introduction to board development will allow students to communicate garments successfully. Portfolio development will be discussed. (6 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 1325***Digital Design for Fashion***

3 Credit Hours

Using raster and vector software such as Photoshop (Ps) and Illustrator (Ai) students will create digital versions of original sketches to be used on digital presentation boards. Personal library of styles and details will be developed. Portfolio quality work will be emphasized. (2 lecture hours, 2 lab hours)

FASHI 1430***Fashion Styling I***

3 Credit Hours

Introduction to fashion styling as a mode of personal expression and visual communication. Study of garments, fashion trends, and the work of influential stylists and fashion icons for the development of styling concepts. Styling assignments will emphasize the techniques and tools for executing professional styling sessions for diverse populations and presentations for various media. (3 lecture hours)

FASHI 1460***Visual Merchandising I***

3 Credit Hours

Explore visual merchandising and display techniques in a variety of retail settings. Students will be introduced to the various ways visual displays are created throughout traditional brick and mortar retail environments. Students will identify challenges in the conception and installation as they work to complete multiple window installations. (2 lecture hours, 2 lab hours)

FASHI 1480***Business Practices for the Artisan Entrepreneur I***

3 Credit Hours

Fundamental business practices for non-business students interested in owning an artisan or creative business. This course provides an overview of considerations and decisions a creative business owner regularly encounters. Topics will guide a creative student through the process of using business strategies, marketing techniques, product development, and logistics to analyze the practicality of a creative business. (3 lecture hours)

FASHI 1500***Fashions' History***

3 Credit Hours

History of costume from pre historic through the 21st century and its connection to modern fashion. Emphasis is placed on exploration of 20th and 21st century and the effects of social influence on fashions change. Textile, silhouettes and costume details will be investigated. Design Journals will be utilized in research. (3 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One.

FASHI 1510***Fashion Product Development I***

3 Credit Hours

Overview of the fashion product development cycle, from initial trend and consumer analysis, merchandising strategies, global sourcing, garment fit, manufacturing, and presentation of the product line. Students learn about the role of the product developer and examine advantages and disadvantages of successful private label merchandising. (3 lecture hours)

FASHI 1531***Business of Fashion***

3 Credit Hours

Exploration of the large and complicated fashion industry. Survey of markets, research and analysis, delivery schedules, product development, line plans, and selling reports. Changes in fashion industry practices and career opportunities will be discussed. (3 lecture hours)

FASHI 1551***Textiles for Fashion***

3 Credit Hours

Introduction to textiles used in the apparel industry. Students will learn to identify fibers, yarns and fabrics with an emphasis on evaluating characteristics for best use in the fashion industry. Environmental impact and sustainable alternatives will be examined. (2 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 1560***Sustainability in Fashion***

3 Credit Hours

Exploration of the environmental and social impacts of the fashion industry and how participation in sustainable practices can change the future of fashion. (3 lecture hours)

FASHI 1620***Visual Merchandising I***

3 Credit Hours

Survey of creative and technical approaches to window and interior store display. Exploration of standard and innovative techniques in a laboratory setting. (1 lecture hour, 4 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 1630***Brand Strategy Entrepreneur I***

3 Credit Hours

In the competitive fashion industry, brands require a unique and recognizable identity to stand apart. Exploration of strategies for identifying brand strengths. Includes conducting trend research to properly position a brand within a chosen market. Analysis of merchandising and promotion strategies will be used to maximize brand visibility and profitability. (3 lecture hours)

Prerequisite: FASHI 1531 or FASHI 1210 with a grade of C or better or equivalent or consent of instructor.

FASHI 1800***Special Project***

1-4 Credit Hours

Experiential courses cover topics not otherwise covered by general education courses and other courses in the catalogue for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70% (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics). This course may be taken four times for credit as long as a different topic is selected each time. (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One or Two.

FASHI 1820***Selected Topics in Fashion Merchandising***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours, 1 to 6 lab hours)

Prerequisite: Pre-enrollment criteria will depend on the individual topic.

FASHI 1821***Selected Topics in Fashion Design***

1-3 Credit Hours

Exploration and analysis of topics within the discipline. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours, 1 to 6 lab hours)

Prerequisite: Pre-enrollment criteria will depend on the individual topic.

FASHI 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category Two.

FASHI 2200***Tailoring***

3 Credit Hours

Contemporary and traditional tailoring methods including: fitting, pressing, shaping, collar, closures, pockets, lining, and finishing. (6 lab hours)

Prerequisite: FASHI 1201 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2205***Bridal and Couture Techniques***

3 Credit Hours

Study of couture sewing methods for wedding and special occasion dresses. Emphasis on inner support and construction of a bustier, bustle and train construction. Use of specialty fabrics, laces, and couture embellishments. (6 lab hours)

Prerequisite: FASHI 1202 with a grade of C or better, or equivalent or FASHI 1302 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2206***Bridal Couture II***

1.5 Credit Hours

Advanced couture sewing methods for wedding and special occasion dresses. Advanced embellishment techniques, bustle and train construction. Discussion of the independent bridal couture business. (3 lab hours)

Prerequisite: FASHI 2204 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2208***Millinery Design I***

1.5 Credit Hours

Creation of custom hats from straw, felt, and fabric. Use of professional millinery techniques and supplies. (3 lab hours)

Prerequisite: FASHI 1201 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2210***Millinery Design II***

1.5 Credit Hours

Advanced millinery techniques including pattern drafting, blocking and trims. (1 lecture hour, 2 lab hours)

Prerequisite: FASHI 2208 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2212***Advanced Fashion Illustration***

3 Credit Hours

Emphasis on texture, color, layout, and additional figure types. Includes development of portfolio. (6 lab hours)

Prerequisite: FASHI 2211 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2224***Production Pattern Grading***

3 Credit Hours

Methods and mechanics of production pattern grading and its applications in the apparel manufacturing process. Emphasis on development of grade rule tables, manual and computerized grading, production specifications, and grading of specific apparel styles. (2 lecture hours, 2 lab hours)

Prerequisite: FASHI 1102 or equivalent, or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2235***Apparel Quality Analysis***

3 Credit Hours

Identification of terminology, manufacturing methods and merchandise quality as they apply to style details, workmanship, construction techniques, and wearability of fashion goods. For the professional entering the field of fashion buying and merchandising or product development and manufacturing. (3 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 2240***Design Studio: Fibers***

3 Credit Hours

Advanced exploration of a theme or advanced techniques to generate fiber portfolio pieces. (6 lab hours)

Prerequisite: FASHI 1112 and FASHI 1116, both with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2245***Design Collection Development***

3 Credit Hours

Development of a marketable apparel, accessory or home fashion collection using professional trend projections, fabric and notion sourcing, sizing, grading and quality control. (6 lab hours)

Prerequisite: FASHI 2202 with a grade of C or better, or equivalent or consent of instructor.

FASHI 2251***Fashion Motivation***

3 Credit Hours

Identification of economic and social forces influencing consumer and fashion demand. Color theory and analysis, wardrobing, body type identification, and corporate and personal image. (3 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 2255***Design Studio: Marketing the Collection***

3 Credit Hours

Marketing of a design collection at the wholesale and retail level. Topics covered include development of pricing, line sheets, orders, production schedules and delivery of goods. (6 lab hours)

Prerequisite: FASHI 2245 with a grade of C or better, or equivalent or consent of instructor.

FASHI 2261***Textile Design I***

3 Credit Hours

Introduction to Textile Design application processes. Students will experiment and create garments and textile products using dyes, resists, stencils, block, and digital prints. (6 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 2262***Textile Design II***

3 Credit Hours

Advanced dying and printing methods including dye resists, screen, and other textile printing processes. (6 lab hours)

Prerequisite: FASHI 2261 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2300***Flat Pattern Drafting II***

3 Credit Hours

Advanced flat pattern development. Personal exploration of design concepts will be used to create garments. Blocks and contour slopers will be developed then used to create jackets, pants, and jeans. Blocks and slopers will be added to personal set started in Flat Pattern Drafting I. Digital clipping file will be expanded. (6 lab hours)

Prerequisite: FASHI 1301 with a grade of C or better, or equivalent. Course requires Reading Placement Test Score-Category Two.

FASHI 2301***Draping***

3 Credit Hours

Introduction to draping principles and techniques using an industry dress form. Exploration of body through use of shaping techniques, pleats and gathering of woven and knit fabrics. Original garments will be draped and constructed. Design journal and clipping file will be utilized. (6 lab hours)

Prerequisite: FASHI 1301 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2302***Design Studio: Apparel***

3 Credit Hours

This capstone class concludes with a professional critique and fashion show. Students design a collection using research and concept development of their chosen theme. Using advanced making techniques students create the collection first in muslin for model fittings then continue working the process to final fabric. Portfolio quality boards are required. (2 lecture hours, 4 lab hours)

Prerequisite: FASHI 2300 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Two.

FASHI 2311***Fashion Portfolio Presentation***

3 Credit Hours

Existing design work will be refined to develop a unique portfolio highlighting strengths and skills to the target viewers. Current trends in portfolio presentation will be studied and incorporated into portfolio development. Opportunity to identify career goals and develop a job search strategy. (1 lecture hour, 4 lab hours)

Prerequisite: FASHI 1315 with a grade of C or better or equivalent or consent of instructor.

FASHI 2320***Digital Pattern Drafting***

3 Credit Hours

Using industry centered digital pattern making software, students will create garment patterns digitally, print out the patterns, and cut and sew the garment together. Half-scale patterns will be used to review traditional pattern drafting techniques. Garments created could include a women's top, dress, pleated skirt, pants, and a garment of their own choosing. Patterns will be used for grading and making markers. (6 lab hours)

Prerequisite: FASHI 1301 with a grade of C or better, or equivalent, or consent of instructor.

FASHI 2325***Embellishment, Fabrication, and Garment Understructure***

3 Credit Hours

Exploration of embellishment, fabrication, and garment understructure techniques. Students will produce samples to create original fabrics used in garments. Portfolio and process documentation will be required. (6 lab hours)

Prerequisite: FASHI 1201 or equivalent.

FASHI 2330***Sportswear Design***

3 Credit Hours

Exploration of techniques used in the design and construction of garments for the Athleisure and Sportswear markets. Students will learn basic construction techniques, fabric and pattern selection, and pattern adjustment for fit based on body measurements. Students will design and execute multi-layered looks with a focus on knitwear and RTW items. (6 lab hours)

Prerequisite: FASHI 1202 with a grade of C or better, or equivalent, or FASHI 2300 with a grade of C or better, or equivalent, or consent of instructor.

FASHI 2335***Bridal, Special Occasion, and Alteration Techniques***

3 Credit Hours

Study of intricate sewing methods specific to wedding and special occasion dresses. Exploration of haute couture methods and inner support of wedding gowns, layered constructions, and techniques for bustier, skirt, and train construction. Students will gain proficiency in wedding alterations, gown restyling, and custom tailoring techniques. (6 lab hours)

Prerequisite: FASHI 1202 with a grade of C or better, or equivalent, or FASHI 2300 with a grade of C or better, or equivalent, or consent of instructor.

FASHI 2420***Fashion Promotion***

3 Credit Hours

Fashion promotion students will plan, promote, and produce a fashion show and social media campaign in partnership with design students. This course will research and observe variations in the way fashion is promoted. (2 lecture hours, 2 lab hours)

FASHI 2425***Fashion Communication***

3 Credit Hours

Discover traditional and digital communication opportunities in order to develop a comprehensive understanding of the current fashion media and communication landscape. Students will build a go to market strategy for a fashion client, applying skills learned in the course. (3 lecture hours)

Prerequisite: FASHI 1531 or FASHI 1210 with a grade of C or better, or equivalent, or consent of instructor.

FASHI 2435***Quality Evaluation of Apparel***

3 Credit Hours

Evaluation of quality markers that influence fit, price, performance, and aesthetics of ready-to-wear garments. Exploration of the trends in quality and manufacturing processes in the fashion industry and their impact on sustainable practices using case studies and class discussions. (3 lecture hours)

FASHI 2440***Fashion Trends and Forecasting***

3 Credit Hours

The evolving nature of the fashion industry requires research and creative thinking to remain up-to-date and relevant. Through case studies, internet and hands-on research, students explore forecasting methods used to identify trends influencing fashion merchandising and business planning. (3 lecture hours)

Prerequisite: FASHI 1531 with a grade of C or better or equivalent or consent of instructor.

FASHI 2445***Brand Strategy for Fashion***

3 Credit Hours

In the competitive fashion industry, brands require a unique and recognizable identity to stand apart. Exploration of strategies for identifying brand strengths. Includes conducting trend research to properly position a brand within a chosen market. Analysis of merchandising and promotion strategies will be used to maximize brand visibility and profitability. (3 lecture hours)

Prerequisite: FASHI 1531 or FASHI 1210, or equivalent, with a grade of C or better or consent of instructor.

FASHI 2450***Contemporary Retail for Fashion***

3 Credit Hours

The retail landscape has been experiencing tremendous changes as consumers are finding themselves with more options for acquiring fashion goods. Explore traditional and new retail formats and the process by which merchandise reaches the consumer. All levels of retail operations will be explored including store management, human resources, inventory management, store environment planning, retail marketing strategies, financial planning, merchandise buying, and consumer relationship. (3 lecture hours)

Prerequisite: FASHI 1531 with a grade of C or better or equivalent or consent of instructor.

FASHI 2455***Future of Fashion Retail***

3 Credit Hours

Explore the rapidly evolving retail environment. Students will be introduced to the various ways digital technologies are integrated throughout the traditional brick and mortar retail environment, as well as other current and emerging issues in retail. Students will identify challenges in the retail environment and recommend true-to-brand strategies that encompass multiple channels, resulting in innovative retail recommendations for an existing brand. (3 lecture hours)

Prerequisite: FASHI 1531 with a grade of C or better, or equivalent, or FASHI 1210 with a grade of C or better, or equivalent, or consent of instructor.

FASHI 2461***Visual Merchandising II***

3 Credit Hours

Exploration of visual communication for the purpose of connecting a consumer to a fashion product through interior and exterior retail displays. Students will work in teams to physically construct a variety of displays, identifying challenges in the conception and installation process. (1 lecture hour, 4 lab hours)

Prerequisite: FASHI 1460 with a grade of C or better, or equivalent, or consent of instructor.

FASHI 2465***Professional Practices for Fashion Merchandisers***

3 Credit Hours

Create a professional body of work based on individual career interests in the fashion industry. Students will learn how to present themselves professionally through written, oral, and visual communication. Students will gain an understanding of the current fashion and retail work environment, state of the industry, as well as career paths and opportunities for long-term careers in the fashion industry. (3 lecture hours)

Prerequisite: FASHI 1531 with a grade of C or better, or equivalent, or FASHI 1210 with a grade of C or better, or equivalent, or consent of instructor.

FASHI 2480***Business Practices for the Artisan Entrepreneur II***

3 Credit Hours

Continuation of essential business practices for the non-business student interested in owning an artisan or creative business. This second course provides an opportunity to conceptualize, explore, and formulate an artisan or creative business either hypothetical or actual. Students will conduct in-depth market research to determine a target market, develop actual marketing and communication material, create a preliminary prototype, and calculate start-up costs. (3 lecture hours)

Prerequisite: FASHI 1480 with a grade of C or better, or equivalent.

FASHI 2500***Modern Fashion History***

3 Credit Hours

Explore fashion history through the modern time periods of the 20th and 21st century. Emphasis on social influences on fashion as it changes. (3 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category Two.

FASHI 2510***Fashion in the US***

3 Credit Hours

Tour fashion industry locations across the USA. Students will learn about retail, wholesale, and supportive fashion businesses by exploring resources and creating connections with others in their field of study. Repeatable for credit at different locations. (3 lecture hours)

FASHI 2820***Advanced Selected Topics***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours, 1 to 6 lab hours)

Prerequisite: Pre-enrollment criteria will depend on the individual topic.

FASHI 2860**Internship (Career & Technical Ed)**

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

FASHI 2865**Internship Advanced (Career & Tech Ed)**

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Fire Science (FIRE)

FIRE 1100**Introduction to Emergency Services**

3 Credit Hours

Students will explore the field of fire protection and emergency services. Career opportunities, culture and history of the fire service along with fire loss analysis are explored. Topics include public and private regulations affecting the fire service and basic chemistry of fire covering strategy and tactics of extinguishment. (3 lecture hours)

FIRE 1101**Basic Operations Firefighter- Mod A**

6 Credit Hours

This is a hybrid course that provides partial training toward Basic Operations Firefighter Certification by the Office of the State Fire Marshal. Topics discussed include orientation/organization, fire behavior, building construction, safety, communication, self-contained breathing apparatus (SCBA) extinguisher training, ropes and knots, hazardous material operations level, and the national incident management system (NIMS) 100 and 700 Course. Completion qualifies students for the State Fire Marshal Certification Test Module A. (3 lecture hours, 6 lab hours)

Prerequisite: As Per the current Office of the State Fire Marshal Illinois Administrative code 141.300-a. Student must be engaged in firefighting and a member of an organized Illinois fire department or Fire Brigade. Student must provide National Fire Protection Association (NFPA) compliant protection clothing and self-contained breathing apparatus (SCBA) in accordance with NFPA safety standards. Students must be clean-shaven.

FIRE 1102**Basic Operations Firefighter-B**

6 Credit Hours

Continuation of FIRE 1101. This is a hybrid course that provides partial training toward Basic Operations Firefighter Certification by the Office of the State Fire Marshal. Topics discussed include ladders, hose and appliances, nozzles and fire streams, water supply, forcible entry, ventilation, hazardous material operations level continuation, fire service vehicle operator. Completion qualifies students for the State Fire Marshal Certification Test Module B. (3 lecture hours, 6 lab hours)

Prerequisite: FIRE 1101 or equivalent and as Per the current Office of the State Fire Marshal Illinois Administrative code 141.300-a. Student must be engaged in firefighting and a member of an organized Illinois fire department or Fire Brigade. Student must provide National Fire Protection Association (NFPA) compliant protection clothing and self-contained breathing apparatus (SCBA) in accordance with NFPA safety standards. Students must be clean-shaven.

FIRE 1103**Basic Operations Firefighter-C**

6 Credit Hours

Continuation of FIRE 1102. This course is a hybrid that provides partial training toward Basic Operations Firefighter Certification by the Office of the State Fire Marshal. Topics discussed include search and rescue, fire control, loss control, protecting evidence, fire detection and alarm systems, prevention and public education, wild land and ground cover firefighting, firefighter survival, technical rescue awareness, completion of hazardous material operations level, and courage to be safe. Course completion qualifies students for the State Fire Marshal Certification Test Module C. (3 lecture hours, 6 lab hours)

Prerequisite: FIRE 1102 with a grade of C or better or equivalent and as per the current Office of the State Fire Marshal Illinois Administrative code 141.300-a. Student must be engaged in firefighting and a member of an organized Illinois fire department or Fire Brigade. Student must provide National Fire Protection Association (NFPA) compliant protection clothing and self-contained breathing apparatus (SCBA) in accordance with NFPA safety standards. Students must be clean-shaven.

FIRE 1104**Advanced Technician Firefighter**

4 Credit Hours

Continuation of FIRE 1101, FIRE 1102, FIRE 1103 sequence. The Advanced Technician Firefighter is considered by Office of the State Fire Marshal (OSFM) to be the senior technical level in the fire suppression career ladder. A state certified examination will be administered to determine qualification. (2 lecture hours, 4 lab hours)

Prerequisite: FIRE 1101, FIRE 1102, and FIRE 1103, or certification as a Firefighter II or Basic Operations Firefighter or consent of instructor.

FIRE 1111**Fire Prevention I**

3 Credit Hours

Fire Prevention I is for fire service personnel pursuing a Fire Officer I Certification or seeking a quality fire prevention foundation following the Illinois Office of the State Fire Marshal's guidelines. (3 lecture hours)

Prerequisite: Consent of Instructor or Fire Science Manager is required.

FIRE 1112***Principles of Fire Prevention***

3 Credit Hours

Principles of Fire Prevention provides the fundamental knowledge relating to the field of fire prevention and inspection. This course meets the National Fire Emergency Service Higher Education (FESHE) requirements. (3 lecture hours)

Prerequisite: FIRE 1100 or concurrent enrollment in FIRE 1100 or consent of instructor.

FIRE 1113***Fire Prevention Officer Module A***

3 Credit Hours

Designed for personnel whose duties are inspecting structures, conducting basic fire investigations and performing fire prevention education activities. (3 lecture hours)

FIRE 1114***Fire Prevention Officer Module B***

3 Credit Hours

Continuation of FIRE 1113, including knowledge of fire codes used in fire prevention and education. (3 lecture hours)

Prerequisite: FIRE 1113 with a grade of C or better or consent of instructor.

FIRE 1115***Fire Prevention Officer Module C***

3 Credit Hours

Continuation of FIRE 1114 including development of student skills in public education and fire investigation. (3 lecture hours)

Prerequisite: FIRE 1114 with a grade of C or better or consent of instructor.

FIRE 1120***Codes and Laws***

3 Credit Hours

Study supplemented by plan reviews of codes and standards that relate to fire prevention and life safety in structures and includes the relationship between building officials and fire prevention personnel. (3 lecture hours)

FIRE 1150***CPR-Basic Life Support-Healthcare Prvdr***

1 Credit Hour

Cardiopulmonary resuscitation (CPR) is intended for healthcare providers who care for patients of all ages in a variety of settings, including hospitals and other healthcare settings. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

FIRE 1160***CPR-Basic Life Support Instructor***

1 Credit Hour

Prepare American Heart Association (AHA) instructors to disseminate the science, skills, and philosophy of Cardiopulmonary Resuscitation (CPR) programs to participants enrolled in AHA courses. (2 lab hours)

Prerequisite: FIRE 1150 with a grade of C or better, or equivalent or consent of instructor.

FIRE 1181***Public Safety Telecommunications I***

3 Credit Hours

An introduction into the exciting career of a 9-1-1 Public Safety Telecommunicator. Successful completion of this course is required to take the nationally-recognized Emergency Telecommunicator Certification test. Students will combine classroom and lab exercises to demonstrate the skills and abilities needed as a 9-1-1 Public Safety Telecommunicator. (2 lecture hours, 2 lab hours)

Prerequisite: Must be at least 18 years old with a high school diploma or equivalent. Writing Placement Category One and Reading Placement Category One are required.

FIRE 1182***Public Safety Telecommunications II***

3 Credit Hours

Students will further develop the skills and abilities necessary to be a successful 9-1-1 Public Safety Telecommunicator. Using a combination of classroom and lab exercises, students will learn how to answer and process 9-1-1 calls and related radio traffic. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 1181 with a grade of C or higher or consent of instructor.

FIRE 1183***Emergency Medical Responder***

5 Credit Hours

Students will be introduced to pre-hospital and emergency medical training. Basic medical treatments and practical skills in emergency medical care are included. (3 lecture hours, 4 lab hours)

FIRE 2201***Extinguishing and Alarm Systems***

3 Credit Hours

Introductory course to familiarize public and private fire protection personnel with various types of fire protection systems. (2 lecture hours, 2 lab hours)

FIRE 2210***Fire Apparatus***

3 Credit Hours

Study of the design, function and operating characteristics of motorized fire apparatus, including evaluation of custom and commercial chassis, power plant and fire pumps, and cost/benefit approach to apparatus purchasing. (3 lecture hours)

FIRE 2211***Fire Apparatus Engineer***

3 Credit Hours

Continuation of FIRE 2210. Application and skills necessary to qualify for Fire Apparatus Engineer/Driver/Operator positions. Meets or exceeds the requirements of National Fire Protection Association (NFPA) 1002, Fire Apparatus Drive/ Operator Professional Qualifications. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 2210 or consent of instructor.

FIRE 2213***Principles/Fire Behavior and Combustion***

3 Credit Hours

Introduction to the broad range of factors that cause a fire. The basics of fire chemistry and physics, ignition, fire growth, spread, and suppression are covered. (3 lecture hours)

Prerequisite: FIRE 1100 with a grade of C or better, or equivalent or consent of instructor.

FIRE 2215***Building Construction***

3 Credit Hours

Provides the components of building construction related to firefighter and life safety. Elements of construction and design of structures are key factors when inspecting buildings, pre-planning fire operations, and operating at emergencies. (3 lecture hours)

Prerequisite: FIRE 1100 with a grade of C or better, or equivalent or FIRE 1103 with a grade of C or better, or equivalent or consent of instructor.

FIRE 2218***Principles of Fire and Emergency Services Safety and Survival***

3 Credit Hours

Basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency service. (3 lecture hours)

Prerequisite: FIRE 1100 with a grade of C or better, or equivalent or consent of instructor.

FIRE 2221***Tactics I***

3 Credit Hours

Principles of coordinating fire ground tactics by utilization of manpower and equipment. Various fire situations presented for analysis and evaluation. (3 lecture hours)

Prerequisite: FIRE 1100 or consent of instructor.

FIRE 2222***Tactics II***

3 Credit Hours

Designed for the Fire Officer responsible for commanding a fire or emergency scene involving multiple companies. Subject areas include strategic concepts in fire fighting, duties and responsibilities of command officers, incident command system (scene, manpower, apparatus, and Rapid Intervention Teams (RIT) management), multi-company operations, disasters, high-rise operations, critical incident stress, and tactical exercises. (3 lecture hours)

Prerequisite: FIRE 2221 with a grade of C or better, or equivalent or consent of instructor.

FIRE 2231***Hazardous Materials Operations***

3 Credit Hours

Intended for members of a fire department or other first responder agency. Includes basic hazards and risk-assessment techniques for Haz-mat and Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) environments. Perform basic control, containment and/or confinement operations. After successful completion of this course, first responders will be allowed to take the Office of the State Fire Marshal (OSFM) certification exam. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 2230 with a grade of C or better, or equivalent or consent of instructor.

FIRE 2232***Hazardous Materials Technician A***

3 Credit Hours

Laws regulating training requirements for the Hazardous Materials Technician A as set forth by Occupational Safety and Health Act (OSHA), Illinois Department of Labor (IDOL), Environmental Protection Agency (EPA), and the National Fire Protection Association (NFPA). Identifies a hazardous material incident, determines the magnitude of the problem, identifies and interprets hazard response information through the use of monitoring equipment. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 1104 and FIRE 2231 or state equivalents or consent of instructor.

FIRE 2233***Hazardous Materials Technician B***

3 Credit Hours

Continuation of Hazardous Materials Technician A involves the analysis and application of rescue procedures, tactics and strategies. Both Hazardous Materials A and B are required to satisfy National Fire Protection Association (NFPA) 472, Department of Labor (DOL), Occupational Safety and Health Act (OSHA), Environmental Protection Agency (EPA), and requirements of 29 Code of Federal Requirements(CFR) 1910.120. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 1104 and FIRE 2232 or state equivalents or consent of instructor.

FIRE 2234***Hazardous Materials Technician***

6 Credit Hours

Students will identify and interpret hazardous material incidents. Learned tactics and strategies will be applied to rescue and mitigation procedures. Other topics include the laws regulating training requirements for the Hazardous Materials Technician as set forth by Occupational Safety and Health Act (OSHA), Illinois Department of Labor (IDOL), Environmental Protection Agency (EPA), and the National Fire Protection Association (NFPA). (5 lecture hours, 2 lab hours)

Prerequisite: FIRE 2231 or equivalent and FIRE 1104 or equivalent, both with grade of C or better, or consent of instructor.

FIRE 2250***Incident Safety Officer***

3 Credit Hours

Students will learn to monitor training evolutions and incidents involving fire, emergency medical services, technical rescue, and hazardous materials, while simultaneously assessing current conditions, hazards, and risks. This class is intended for firefighters who will serve as an Incident Safety Officer (ISO). (3 lecture hours)

Prerequisite: FIRE 2255, FIRE 2257, and FIRE 2258, all with a grade of C or better, or equivalent, or consent of instructor.

FIRE 2251***Fire Leadership I***

3 Credit Hours

Fire fighting personnel will be introduced to management, supervision, and leadership skills. (3 lecture hours)

Prerequisite: FIRE 1103 with a grade of C or better, or equivalent or consent of instructor.

FIRE 2252***Fire Leadership II***

3 Credit Hours

Continuation of FIRE 2251 with emphasis placed on application of principles. (3 lecture hours)

Prerequisite: FIRE 2251 or consent of instructor.

FIRE 2253***Fire Leadership III***

3 Credit Hours

Continuation of FIRE 2252 analyzing and organizing personnel assignments. Developing personnel policies, preparing capital budgets and fiscal financing, developing public relations programs, and developing management systems for the fire service. (3 lecture hours)

Prerequisite: FIRE 2252 or consent of instructor.

FIRE 2254***Fire Leadership IV***

3 Credit Hours

Continuation of FIRE 2253 advanced personnel management, organizing health and safety programs, and labor relations. (3 lecture hours)

Prerequisite: FIRE 2253 or consent of instructor.

FIRE 2255***Fire Service Instructor I***

3 Credit Hours

Fundamentals as applied to in-service training for fire department personnel. The course meets or exceeds the requirements of the Office of the Illinois State Fire Marshals Division of Career Development and Public Education. (2 lecture hours, 2 lab hours)

FIRE 2256***Fire Service Instructor II***

3 Credit Hours

Curriculum planning, facilities layout and advanced teaching principles. The course meets or exceeds the requirements of the Office of the Illinois State Fire Marshals Division of Career Development and Public Education. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 2255 or consent of instructor.

FIRE 2257***Company Fire Officer Phase I***

3 Credit Hours

Students will be introduced to human resource management, community relations, and government relations utilized by the company fire officer. (3 lecture hours)

Prerequisite: FIRE 2255 and FIRE 1104, both with a grade of C or better, or equivalent, and concurrent enrollment in FIRE 2258, or consent of instructor.

FIRE 2258***Company Fire Officer Phase II***

5 Credit Hours

Students will be introduced to the company fire officer's role in administration, inspections, investigations, emergency medical services, and safety. (5 lecture hours)

Prerequisite: FIRE 2255 and FIRE 1104, both with a grade of C or better, or equivalent, and concurrent enrollment in FIRE 2257, or consent of instructor.

FIRE 2260***Fire Investigation***

3 Credit Hours

Techniques and procedures for the investigation of fires including the origin and causes of fires, fire behavior, chemistry of fire, structural fire patterns, detection of arson, role of the investigator, and role of the crime laboratory. (3 lecture hours)

Prerequisite: FIRE 1100 or consent of instructor.

FIRE 2261***Fire/Arson Investigation I***

3 Credit Hours

Designed for fire investigators to gain knowledge in scene examination, evidence investigation, fire protection technology and sketching. (3 lecture hours)

Prerequisite: FIRE 2260 or consent of instructor.

FIRE 2262***Fire/Arson Investigation II***

3 Credit Hours

Continuation of FIRE 2261 includes motives, communications, case presentations and explosives. (3 lecture hours)

Prerequisite: FIRE 2261 or consent of instructor.

FIRE 2263***Fire/Arson Investigation III***

3 Credit Hours

Continuation of FIRE 2262 includes crime scene photography, evidence collection, accelerant detection canines, arson for profit, and search and seizure. (3 lecture hours)

Prerequisite: FIRE 2262 or consent of instructor.

FIRE 2264***Advanced Fire Officer Phase I***

3 Credit Hours

Students will be introduced to labor relations, human resource management, community interaction, fire inspections, fire investigations, and emergency service delivery required of an advanced fire officer. (3 lecture hours)

Prerequisite: FIRE 2250 and FIRE 2256, both with grade of C or better, or equivalent, and concurrent enrollment in FIRE 2265, or consent of instructor.

FIRE 2265***Advanced Fire Officer Phase II***

5 Credit Hours

Students will be introduced to labor relations, human resource management, community interaction, fire inspections, fire investigations, and emergency service delivery required of an advanced fire officer. (5 lecture hours)

Prerequisite: FIRE 2250 and FIRE 2256, both with grade of C or better, or equivalent, and concurrent enrollment in FIRE 2264, or consent of instructor.

FIRE 2267***Fire Service Vehicle Operator***

1 Credit Hour

Designed for Firefighters or Engineers who are assigned, or may be assigned, to operate fire department apparatus safely in the normal course of their duties. (1 lecture hour)

Prerequisite: Consent of instructor is required and must be an active member of a fire department. Contact Fire Science Manager for permit to register.

FIRE 2271***Emergency Medical Technician (EMT)***

10 Credit Hours

Students will be introduced to emergency care skills and management of bleeding, fractures, airway obstruction, cardiac arrest, and emergency childbirth. Other areas include patient assessment skills and the use of common emergency equipment. (5 lecture hours, 8 lab hours, 2 clinical hours)

Prerequisite: Must be at least 18 years old with a high school diploma or equivalent, and pass the Writing Placement Test Score-Category One and Reading Placement Test Score-Category One or FIRE 1183 with a grade of B or better. Admission to program is required.

FIRE 2272***Paramedic Transition***

3 Credit Hours

Emergency Medical Technician (EMT) students will develop their knowledge and skills to better prepare them to be successful in paramedic school. (2 lecture hours, 2 lab hours)

Prerequisite: Current EMT license as an Emergency Medical Technician or consent of instructor.

FIRE 2273***Vehicle and Machinery Operations***

3 Credit Hours

Introductory step in the acquisition of all knowledge and skills required in the various specialties of extrication. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 1103 or consent of instructor.

FIRE 2278***Paramedic I***

12 Credit Hours

Students will be introduced to the role of the paramedic and the ethical and legal aspects that influence field practice skills. Emphasis will be placed on a foundational understanding of pathophysiology, lifespan development, pharmacology, medication administration, assessment, communication, documentation, medical conditions, diseases, and treatment protocols. (6 lecture hours, 8 lab hours, 4 clinical hours)

Prerequisite: Illinois licensed Emergency Medical Technician (EMT) and acceptance into the paramedic program. FIRE 2271 with a grade of B or better or equivalent, ANAT 1500 with a grade of C or better or equivalent, HLTHS 1110 with a grade of C or better, or equivalent and ENGLI 1101 with a grade of C or better, or equivalent or consent of instructor.

FIRE 2279***Paramedic II***

12 Credit Hours

Students will integrate previously learned principles and skills with new theory and prepare for expanded responsibilities. Students will be introduced to additional hospital clinical rotations and the emergency department. (6 lecture hours, 4 lab hours, 8 clinical hours)

Prerequisite: FIRE 2278 with a grade of B or better, or equivalent or consent of instructor.

FIRE 2280***Paramedic III***

12 Credit Hours

Students will continue to learn the fundamentals of caring for patients in medical and traumatic emergencies. Students will also complete clinical rotations. Emphasis is placed on development of assessment practices and the integration of appropriate treatment modalities. (6 lecture hours, 12 clinical hours)

Prerequisite: FIRE 2279 with a grade of B or better, or equivalent or consent of instructor.

FIRE 2282***EMT Instructor Training***

3 Credit Hours

Designed to give the Emergency Medical Technician-Basic (EMT-B) an overview of the educational process for the adult learner. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 2271, consent of instructor, and approval of Illinois Department of Public Health (IDPH).

FIRE 2283***Emergency Medical Responder***

5 Credit Hours

Students will be introduced to pre-hospital and emergency medical training. Basic medical treatments and practical skills in emergency medical care are included. (3 lecture hours, 4 lab hours)

FIRE 2285***Trauma Assessment***

3 Credit Hours

The student will acquire the skills to assess acute, critical changes in physiological and psychological signs and symptoms in emergency trauma patients. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 2271 with a grade of C or better, or equivalent or consent of instructor.

FIRE 2286***Pediatric Education for Prehospital Professionals***

3 Credit Hours

Students will develop additional skills and knowledge of the prehospital professional who will provide care for the ill and injured children. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 2271 with a grade of C or better or consent of instructor.

FIRE 2287***Differential Medical Assessment***

3 Credit Hours

Students will gain advanced training and knowledge of assessment and management of medical emergencies. Students will build a strong foundation of differential medical assessment knowledge and skills through case-based scenarios and practical applications for patients. (2 lecture hours, 2 lab hours)

Prerequisite: FIRE 2271 with a grade of B or better, or equivalent or consent of instructor.

FIRE 2820***Advanced Selected Topics***

1-4 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (1 to 3 lecture hours, 1 to 3 lab hours)

FIRE 2861***Fire Service Internship I***

5 Credit Hours

Semester 1 of a year-long (three semester) internship program. Accepted students will be considered apprentice members of the host fire department or fire protection district, undergoing training and riding at the fire department. (5 lab hours, 5 clinical hours)

Prerequisite: Illinois licensed EMT or AEMT or Paramedic; application to and acceptance by the host fire department or fire district; and consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

FIRE 2862***Fire Service Internship II***

5 Credit Hours

Semester 2 of a year-long (three semester) internship program. Accepted students will be considered apprentice members of the host fire department or fire protection district, undergoing training and riding at the fire department. (5 lab hours, 5 clinical hours)

Prerequisite: FIRE 2861 or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

FIRE 2863***Fire Service Internship III***

5 Credit Hours

Semester 3 of a year long 3 semester internship program. Accepted students will be considered a apprentice member of the host fire department or fire protection district, undergoing training and working at the fire department. (5 lab hours, 5 clinical hours)

Prerequisite: FIRE 2862 or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

French (FRENC)

FRENC 1100***Civilization and Culture of France***

3 Credit Hours

An introduction in English to the culture, geography, history, economics, political institutions, psychology, literature, music and art of present-day France. A survey of the French-speaking world: Canada, North and West Africa, the Caribbean, the South Pacific, Switzerland and Belgium. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

FRENC 1101***Elementary French I***

4 Credit Hours

Develops the ability to speak, understand, read, and write French in a cultural and communicative context. For beginning students with no prior experience in the language. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

FRENC 1102***Elementary French II***

4 Credit Hours

Continues the development of the ability to speak, understand, read, and write French in a cultural and communicative context. For students who have successfully completed French 1101 or equivalent, or one year of high school French, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

FRENC 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

FRENC 2201***Intermediate French I***

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write French in a cultural and communicative context. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed French 1102 or equivalent, or two years of high school French, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

FRENC 2202 (H1 900)***Intermediate French II***

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write French in a cultural and communicative context. Includes reading and discussion of modern texts, short films, conversation, composition, grammar review, and cultural activities. For students who have successfully completed French 2201 or equivalent, or three years of high school French, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

FRENC 2251 (H1 900)***Conversation and Composition I***

3 Credit Hours

Develops students' listening comprehension, speaking, reading, and writing skills and expands knowledge of the culture and civilization of French-speaking countries. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed French 2202 or equivalent, or four years of high school French, or consent of instructor. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

FRENC 2252 (H1 900)***Conversation and Composition II***

3 Credit Hours

Develops students' listening comprehension, speaking, reading, and writing skills and expands knowledge of the culture and civilization of French-speaking countries. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed French 2251 or equivalent, or five years of high school French, or consent of instructor. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

FRENC 2820***Advanced Selected Topics***

1-4 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One. At least one course in the discipline or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

FRENC 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

FRENC 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

FRENC 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

FRENC 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

General Education Development (GED)

GED 0800***General Education Development Review***

3 Credit Hours

Prepares adult students to take the G.E.D. Literature and the Arts, Writing, Social Studies, Science, Mathematics and the U.S. Constitution tests. Reviews skills, concepts and information needed for the G.E.D. Focuses on developing independent study habits. Step III in the General Education Development reading, writing and mathematical skills course sequence. Mandatory Testing. This course may be taken four times for credit; course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (3 lecture hours)

Prerequisite: Consent of instructor is required.

GED 0801***Spanish General Ed Development Review***

3 Credit Hours

Prepares adult students to take the Spanish General Education Development (GED) Literature and the Arts, Writing, Social Studies, Science Mathematics and the U.S. Constitution tests. Review skills, concepts and information needed for the Spanish GED. Focuses on developing independent study habits. Course is non-transferable and does not count toward GPA/graduation. This course may be taken four times for credit. This course can only be taken on a pass/fail basis. (3 lecture hours)

GED 0802***Bridge to Health Care Careers***

6 Credit Hours

The course prepares adults to pass the GED tests while gaining the skills necessary to train for sustainable employment or post-secondary education in the health care field. Instruction combines reading, writing and math with academic and workplace readiness skills. Students will have the opportunity to explore multiple health care career pathways and learn supporting concepts and terminology. This course was developed by the Illinois Community College Board and has been approved for statewide use. This course does not count toward GPA/graduation and is non-transferable. This course can only be taken on a pass/fail basis. (6 lecture hours)

Prerequisite: Consent of instructor is required.

GED 0805***GED Bridge to CIT***

6 Credit Hours

This course prepares students to pass the GED tests while gaining the skills necessary to train for sustainable employment or post-secondary education in the information technology field. Instruction combines reading, writing, and math with academic and workplace readiness skills. Students will have the opportunity to explore multiple information and technology career pathways and learn supporting concept and terminology. This course can only be taken on a pass/fail basis. This course does not count toward GPA/graduation and is non-transferable. (6 lecture hours)

Prerequisite: Mandatory Testing or completion of ABE 0703 with a grade of S or better, demonstrated equivalent proficiency, or consent of instructor.

GED 0830***GED Review: US/IL Constitution***

1 Credit Hour

Prepares adult students to take the General Education Development (GED) U.S./Illinois Constitution tests. Course is non-transferable and does not count toward GPA/graduation. This course may be taken four times for credit. This course can only be taken on a pass/fail basis. (1 lecture hour)

Geography (GEOGR)

GEOGR 1100 (S4 901)***Western World Geography***

3 Credit Hours

This regional survey will examine the diverse geographic aspects of countries that are deemed to be part of the Western World: Anglo America, Latin America, Europe, Russia and Australia/New Zealand. The interrelationship between people and their geographic environments (physical, social, economic, political, demographic, cultural, historical environments) will be considered. Coverage of countries and regions in this course will range from specific locational descriptions to consideration of broad regional elements. Students will be expected to learn basic place names, to understand geographic relationships and concepts as found in and among these countries, and to learn to think geographically. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GEOGR 1105 (S4 902N)***Eastern World Geography***

3 Credit Hours

This regional survey will examine the diverse geographic aspects of countries that are deemed to be part of the Eastern World: Southwest Asia and North Africa, Sub-Saharan Africa, Southeast Asia, East Asia, South Asia, and Central Asia. The interrelationship between people and their geographic environments (physical, social, economic, political, demographic, cultural, historical environments) will be considered. Coverage of countries and regions in this course will range from specific locational descriptions to consideration of broad regional elements. Students will be expected to learn basic place names, to understand geographic relationships and concepts as found in these countries, and to learn to think geographically. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GEOGR 1107***Introduction to Geography***

3 Credit Hours

A fundamental overview of the methods geographers use to interpret the world. Includes economic, political, cultural and urban geography, as well as geomorphology and biogeography. Also introduces the various tools geographers use from Geographic Information Systems to maps. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1108***Developing Geographic Skills Through a Regional Context***

3 Credit Hours

Development of geographic skills such as map reading, air photo interpretation, and navigation. Tools such as Geographic Information Systems and Google Earth are introduced. Chicagoland, Illinois, and the United States form the spatial foci of the class. (3 lecture hours)

Prerequisite: Reading Placement Category 3 or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1110***Political Geography***

3 Credit Hours

An exploration of power and space relations. This course explores how political decisions and processes impact people and their environs, as well as the meaning, history, implications, and combinations of the concepts of nation and state. It will explore the background and nature of borders, country shapes, regional conflicts, and boundary disputes and also compare major political systems and electoral geography. Students will also explore the politics of globalization, trade and trade agreements, and international law. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1120 (S4 903N)***Economic Geography***

3 Credit Hours

An overview of the spatial distribution of economic activities and resultant economic landscapes. This course includes the study of the Agricultural and Industrial Revolutions, economic models, trade, and debt. This course also considers the roles of governmental bodies, nongovernmental organizations, and corporations in the global economy. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GEOGR 1130 (S4 900N)***Cultural Geography***

3 Credit Hours

An introduction to geographic perspectives on such cultural topics as population, language, ethnicity, politics, religion, economics, and urbanization. Geographic themes such as spatial analysis, sense of place, region, diffusion, globalization, cultural ecology, and cultural landscape are highlighted. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

GEOGR 1140 (S4 901)***Urban Geography***

3 Credit Hours

A geographical examination of settlement patterns, economic activities, usage of space and representations in the urban environment. The form and function of cities are analyzed, as are issues of disenfranchisement and gentrification. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1151***Geographic Information Systems I***

3 Credit Hours

An introduction to the fundamentals of Geographic Information Systems (GIS) with examples of applications in various fields. Use GIS software to capture, store, query, analyze and display spatially referenced data such as roads, land parcels and vegetation stands on the earth's surface. GIS software usage is covered by tutorial exercises in textbook, with assistance by instructor. (2 lecture hours, 2 lab hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1152***Geographic Information Systems II***

3 Credit Hours

Focuses on the principles of Geographic Information Systems (GIS) and emphasizes building skills using ESRI software. This course includes data structure, assembly of GIS data sets, map symbology, queries, spatial analysis, coordinate systems, projections and map presentation. GIS software usage is covered by tutorial exercises in textbook, with assistance by instructor. Students may also work to develop their own GIS projects. (1 lecture hour, 4 lab hours)

Prerequisite: GEOGR 1151 or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1153***Applied Geographic Information Systems***

3 Credit Hours

An opportunity for students to learn through real-life GIS projects developed by public safety officials, public works departments, planners and other industry professionals. (3 lecture hours, 1 lab hour)

Prerequisite: Proficiency with the Windows operating system required; GEOGR 1151 and GEOGR 1152 or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1154***Geodatabase Development***

3 Credit Hours

Advanced study of Geodatabase development, maintenance, organization and editing within the ArcGIS suite of software. Students will explore the basic features and functionality that a geodatabase provides, as well as the ArcMap editing tools for creating and editing the geometry of spatial data stored in a geodatabase. Students will learn to create and manipulate Geographic Information Systems features that mimic real-world feature behavior, apply sophisticated rules and relationships between features, and access geospatial data from a centralized location. (3 lecture hours)

Prerequisite: GEOGR 1153 with a grade of C or better or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1155***GIS Capstone Project***

3 Credit Hours

Focus on student created projects solving problems in the fields of environmental science, marketing, urban planning, resource management and homeland security. Students will learn to draft a Geographic Information Systems proposal, which will include project timelines, system scope, cost-benefit analysis, risk planning, and delivering a final GIS product. Instructor will assist students with project topics, project approach, the availability and acquisition of source data, data organization and assembly, data preparation, GIS analysis techniques and project presentation. Throughout the course, instructor will guide students through the process of gaining GIS employment, including resume building, job interview techniques and obtaining national GISCI (Geographic Information Systems Certification Institute) status. (3 lecture hours)

Prerequisite: GEOGR 1154 with a grade of C or better or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for Geography. These courses require direct experience and focused reflection in an in-depth study of a specific geographic topic and/or the critical analysis of contemporary issues in Geography. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). This course may be taken four times for credit.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required.

GEOGR 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 2204***Russia***

3 Credit Hours

This course examines the diverse geographic aspects of Russia and the former Soviet Union. The interrelationship between people and their geographic environments - physical, social, economic, political, demographic, cultural environments - are considered. Students are expected to learn basic place names, to understand geographic relationships and concepts as found in Russia and the former Soviet Union, and to think geographically about this region. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GEOGR 2210***United States and Canada***

3 Credit Hours

A regional survey of the United States and Canada. Topics may include: Agriculture, manufacturing, the territorial expansion of the United States, Quebec separatism, the North American Free Trade Agreement (NAFTA), gentrification, and urbanization. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 2220***Latin America***

3 Credit Hours

A dynamic survey of Latin America and its countries. An array of topics will be addressed, ranging from physical landscapes to US foreign policy towards the region. The emergence of post-colonial countries, control of natural resources, and the significance of trade/shipping routes are key components of this class. Additionally, students should expect substantial discussion of debt and neoliberalism, international organizations, and trade agreements. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 2221***Mexico***

3 Credit Hours

A geographical exploration and analysis of Mexico. Topics covered may include physical landscape, economic conditions, the War on Drugs, Structural Adjustment and the International Monetary Fund, the North American Free Trade Agreement, the militarization of the U.S.-Mexico border, the Mexican Diaspora, and Mexican communities in the United States. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

GEOGR 2235***The Middle East***

3 Credit Hours

A geographical exploration and analysis of the Middle East. This course provides a survey of the region through a geographic perspective. Included are country locations and discussion of physical features, the Israeli-Palestinian conflict, U.S. foreign policy towards the region, the exploitation of resources (particularly oil), U.S. interventions in Iraq, Iran and Afghanistan, and discussion relating to the War on Terror and the rise of radical Islam. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GEOGR 2820***Advanced Selected Topics I***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

GEOGR 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

GEOGR 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

GEOGR 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

GEOGR 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

German (GERMA)

GERMA 1100***German Civilization and Culture***

3 Credit Hours

Introduction in English to the culture, history, political institutions, mentality, literature, art and economic development of present-day Germany and other German-speaking countries. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GERMA 1101***Elementary German I***

4 Credit Hours

Develops the ability to speak, understand, read, and write German in a cultural and communicative context. For beginning students with no prior experience in the language. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GERMA 1102***Elementary German II***

4 Credit Hours

Continue to develop the ability to speak, understand, read, and write German in a cultural and communicative context. For students who have successfully completed German 1101 or equivalent or one year of high school German, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GERMA 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

GERMA 2201***Intermediate German I***

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write German in a cultural and communicative context. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed German 1102 or equivalent or two to three years of high school German, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GERMA 2202 (H1 900)***Intermediate German II***

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write German in a cultural and communicative context. Includes reading and discussion of modern texts, short films, conversation, composition, grammar review, and cultural activities. For students who have successfully completed German 2201 or equivalent, or three to four years of high school German, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GERMA 2251 (H1 900)***Conversation and Composition I***

3 Credit Hours

Develops students' listening, speaking, reading, and writing skills and expands knowledge of the culture and civilization of German-speaking countries. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. Classes are conducted completely in German. For students who have successfully completed German 2202 or equivalent, or four years of high school German, or consent of instructor. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GERMA 2252 (H1 900)***Conversation and Composition II***

3 Credit Hours

Continues to develop students' listening, speaking, reading, and writing skills and expands knowledge of the culture and civilization of German-speaking countries. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. Classes are conducted completely in German. For students who have successfully completed German 2202 or equivalent, or four to five years of high school German, or consent of instructor. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

GERMA 2820***Advanced Selected Topics***

1-4 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One. At least one course in the discipline or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

GERMA 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

GERMA 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

GERMA 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

GERMA 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Graphic Design (GRDSN)

GRDSN 1100

Drawing for Design

3 Credit Hours

Foundation of drawing illustrative matter for commercial applications using various materials and techniques appropriate to the field of graphic design and illustration. Emphasis on visualization and sketching of concepts. (6 lab hours)

GRDSN 1101

Digital Graphic Applications

3 Credit Hours

Explores graphics software package Adobe Creative Suite, focusing on core concepts and techniques that apply to any workflow in Photoshop, Illustrator, and InDesign. Emphasizes technical and print production skills necessary to develop effective designs for print, web, and other applications. (1 lecture hour, 5 lab hours)

GRDSN 1102

Graphic Design 1

3 Credit Hours

Introduces the basic principles and elements of graphic design, the history of graphic design, form/symbol development, typography, and color theory. Provides practical experience in essential studio processes and procedures, critiques, and group discussions. (6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

GRDSN 1104

Typography

3 Credit Hours

Introduction to typographic history, study of letterforms, terms, classifications, and typeface selection. Exploration of type mechanics and aesthetics, using type in a variety of design applications. Examines structure, layout, and information hierarchy, as well as the relationship of type to image and cultural context. (6 lab hours)

GRDSN 1105

Graphic Design 2

3 Credit Hours

An exploration of graphic design through the integration of typography and imagery from planning, conceptualization, and creation, through management of content for a variety of projects. Major themes include: contrast and fusion of graphic form, text/image collage, hierarchy, grid systems, and extended layouts. Critiques and discussions of professional work including traditional structures of books, catalogs, magazines, and brochures. Emphasizes the use of Adobe InDesign in creating projects. (6 lab hours)

Prerequisite: GRDSN 1102 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 1106

Three-Dimensional Design

3 Credit Hours

Design and construction of three-dimensional forms such as packaging, exhibits, and displays. Students will conceptualize and develop preliminary construction plans, and build mock-ups of three-dimensional communication design projects using a variety of materials and techniques. (6 lab hours)

Prerequisite: GRDSN 1102 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 1107

Digital Illustration 1

3 Credit Hours

An introduction to creating digital images for use in graphic design. Use of computers and current software to develop illustrative projects. Focus on originality of imagery and image creation techniques including collage, montage, and mixed media to create professional quality images. Emphasis on the use of Adobe Photoshop and/or other raster-oriented software in creating projects. (6 lab hours)

Prerequisite: GRDSN 1102 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 1108

Digital Illustration Design 2

3 Credit Hours

Focuses on the originality of imagery and image creation techniques, including collage, montage, and mixed media, to create professional quality images. Emphasis on the use of Adobe Illustrator and/or other vector-based software in creating illustration projects. (6 lab hours)

Prerequisite: GRDSN 1102 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 1109

Project Planning for Graphic Design

3 Credit Hours

Explores the intersection of business and graphic design, introducing fundamentals of planning, research, analysis, presentation techniques, and production coordination. Addresses the entrepreneurial and strategic aspects of the business of design, as well as design concerns within a client's business environment. Course content may include case studies, group projects, guest speakers, and corporate events to prepare students to apply creative vision to the fulfillment of business objectives. (1 lecture hour, 5 lab hours)

Prerequisite: GRDSN 1102 with a grade of C or better, or equivalent.

GRDSN 1820

Selected Topics

2 Credit Hours

Critical discussion, review and analysis of a selected topic in advertising, design or illustration. Completion of projects appropriate to the selected topic. Topic is specified in the subtitle of the course listed in the class schedule. This course may be taken four times for credit as long as a different topic is selected each time. (1 lecture hour, 2 lab hours)

Prerequisite: Any 1100-level GRDSN course or consent of instructor.

GRDSN 1821

Selected Topics

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

Prerequisite: Any 1100-level GRDSN course or consent of instructor.

GRDSN 1840

Independent Study

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (8 lab hours)

Prerequisite: Consent of instructor is required.

GRDSN 2200***User Experience Design***

3 Credit Hours

Study of user experience design for interactive environments through the exploration of user interface, user personas, sitemaps, wire framing, prototypes, and current trends and practices in the field. Emphasis is placed on visual hierarchy and understanding the logical placement and flow of content to achieve a client's goals and create a navigable environment for the user. (6 lab hours)

Prerequisite: GRDSN 1102 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2201***Graphic Design 3***

3 Credit Hours

Development of visual identity systems for organizations and corporations applied to print, web, and broadcast media. Focuses on how organizations use identity design to express core values and impact consumer perceptions of brand. Processes include research, conceptualization, image, type generation, layout, presentation, and evaluation. (6 lab hours)

Prerequisite: GRDSN 1105 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2202***Web/Interactive Design 1***

3 Credit Hours

Designing for interactivity in environments such as the web, portfolios, and apps with an emphasis on interactive design workflow. Designing HTML- and CSS-based web pages, prototypes, and web sites utilizing industry-standard hardware and software. Developing interactive concepts and organization and integration of content into web sites. Creating, preparing, and manipulating documents, illustrations, and images for the web. (6 lab hours)

Prerequisite: GRDSN 1102 with a grade of C or better and GRDSN 2200 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2203***Advertising Design***

3 Credit Hours

Introduction to creative brief writing, concept development, brand positioning, client/agency relationship, copywriting, and research methods. Study of cultural, social, and psychological aspects of advertising design, including consumer behavior and effects of globalization. Survey and development of advertising design for various media, including print, broadcast, direct mail, packaging, and point-of-purchase. (6 lab hours)

Prerequisite: GRDSN 1102 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2204***Digital Illustration 3***

3 Credit Hours

Continues the development of skills necessary to create illustration projects. Uses a combination of traditional drawing skills and current industry standard vector/raster-based software, such as Adobe Illustrator and Photoshop. (6 lab hours)

Prerequisite: GRDSN 1108 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2205***Graphic Design 4***

3 Credit Hours

Studies communication of ideas and information through symbols, images, illustration, and typography as applied to print, new media, and other types of graphic design projects. Emphasis on professional design, illustration processes and presentation skills. Practical application of design theory in a simulated design studio/agency environment. (6 lab hours)

Prerequisite: GRDSN 2201 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2206***Web/Interactive Design 2***

3 Credit Hours

Development of web and interactive design concepts and processes through advanced projects. Planning and development of web site design, mobile interface design, digital portfolio, and menus, and screens is explored using current authoring tools and techniques. Current trends and practices are studied and integrated into project designs. (6 lab hours)

Prerequisite: GRDSN 2202 with a grade of C or better or equivalent or concurrent enrollment in GRDSN 2202 or consent of instructor.

GRDSN 2208***Portfolio Seminar***

3 Credit Hours

Capstone course in the development of a personal portfolio of communication design projects. Emphasizes creative self-assessment, portfolio preparation, written communication, presentation, interview, and job search skills. Review of professional portfolio work and exploration of career opportunities in communication design. Students will demonstrate their understanding of design principles and creative problem-solving abilities through a portfolio of professional quality work. (6 lab hours)

Prerequisite: GRDSN 2201 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2210***Cartooning***

3 Credit Hours

Creation of original written and illustrated cartoons with an emphasis on character development for animation. Historical overview of cartooning as visual storytelling. Exploration of drawing materials and techniques as related to cartooning. Examination of how to individualize cartoon characters, leading to clear and concise techniques for conveying character, stories, humor, and concepts. (6 lab hours)

Prerequisite: GRDSN 1100 or ART 1101 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2211***Storyboarding/Sequential Art***

3 Credit Hours

Study of visual storytelling ideas and techniques with an emphasis on storyboarding for animation and film. Includes developing scripts, drawing techniques, working with various materials and media, creating character model sheets, and storyboarding for character animation. Students break down ideas and scenes sequentially to promote visual storytelling. (6 lab hours)

Prerequisite: GRDSN 2210 with a grade of C or better, or equivalent or consent of instructor.

GRDSN 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

GRDSN 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Health Information Technology (HIT)

HIT 1107***CPT Coding***

3 Credit Hours

This course introduces students to the Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) code sets. The students will learn to interpret healthcare documentation and apply guidelines, rules, and terms for the proper assignment of physician procedures and service codes. (3 lecture hours)

Prerequisite: Admission to the HIT program.

HIT 1108***ICD-10-CM Coding for Physician Services***

3 Credit Hours

Students will be introduced to the International Classification of Diseases (ICD) 10-CM for coding and reimbursement of physician office services. (2 lecture hours, 2 lab hours)

Prerequisite: HLTHS 1110 with a grade of C or better or equivalent or consent of instructor.

HIT 1109***Inpatient Procedural Coding***

3 Credit Hours

This course provides an introduction to the format and application of the ICD-10-PCS coding system. Students will learn the unique meaning of each PCS code character and how it relates to code application. They will expand their knowledge of inpatient procedures and ancillary services as they review medical documentation to abstract information pertinent to building PCS codes. (3 lecture hours)

Prerequisite: Admission to the HIT degree program is required.

HIT 1110***Diagnostic Coding***

3 Credit Hours

This course introduces the ICD-10-CM code set, coding format and structure, coding conventions, and guidelines. Students will evaluate medical documentation and learn how to abstract, assign, and sequence diagnostic codes. (3 lecture hours)

Prerequisite: Admission to the HIT degree program is required.

HIT 1130***Survey of Health Information Management***

4 Credit Hours

In this introductory course, students will explore the health information management profession and its impact on the delivery of healthcare in a variety of settings. Students will gain insight into the health record and the importance it plays in the delivery of safe, timely, and quality health care. Federal and state agencies will be explored along with facility accreditation standards, documentation compliance, and Health Information Portability and Accountability Act (HIPAA) role in reimbursement systems. (4 lecture hours)

Prerequisite: Admission to the HIT degree program is required.

HIT 1140***Disease and Pharmacology for Health Information Technology***

4 Credit Hours

Students will examine information on abnormal changes in body systems as indicators of common diseases and pathological conditions. Information is presented on the pharmacologic agents used to treat the diseases with a focus on fundamental concepts of drug classification. (3 lecture hours, 2 lab hours)

Prerequisite: Admission to the HIT program is required.

HIT 1210***Health Information Statistics and Analysis***

3 Credit Hours

Students will learn to apply statistical formulas to the calculation and analysis of health care data, as well as the fundamentals data visualization. Students will use software programs and learn best practices for data display and basic research methodologies. Students will have the opportunity explore data related to patient quality, safety, outcomes, public health and continuous improvement projects in healthcare. (3 lecture hours)

Prerequisite: PSYCH 2280 or SOCIO 2205 or MATH 1635. Admission to the HIT degree program is required.

HIT 1217***Revenue Cycle Management for Health Information Technology***

4 Credit Hours

Students are introduced to the financial aspects of healthcare. The course covers registration, medical coding systems, healthcare insurance, reimbursement methodologies, compliance, charge capture, claims processing, and the collection of patient service revenue. (3 lecture hours, 2 lab hours)

Prerequisite: Admission to the HIT program is required.

HIT 1301***Anatomy and Pharmacology for Medical Coders and Billers***

3 Credit Hours

Students will examine the twelve body systems, the organs that they comprise, and the function of each. Basic pharmacology terms, treatments, and routes of administration will be explored. Clinically important diseases, associated etiology, and manifestations will be presented. This course is designed to prepare students to be able to understand and abstract clinical documentation required to assign appropriate diagnostic and procedural medical codes. (3 lecture hours)

HIT 1302***Introduction to Diagnostic Coding***

3 Credit Hours

International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) coding is a system used by healthcare providers to classify and report diseases and disorders. This course is designed to provide a comprehensive understanding of the ICD-10-CM coding system including its structure, conventions, and guidelines. (3 lecture hours)

Prerequisite: HLTHS 1110 or concurrent enrollment in HLTHS 1110.

HIT 1401***CPT Coding for Physician Office***

4 Credit Hours

Students will learn how to interpret physician documentation in order to assign appropriate procedure codes. Students will learn how to apply the Current Procedural Terminology (CPT) conventions and official guidelines for coding and reimbursement. Real-world examples and hands-on activities are used to prepare students to become professional physician coders. (4 lecture hours)

Prerequisite: HIT 1301, HIT 1302, and HLTHS 1110.

HIT 1402***Legal and Ethical Concepts for Medical Coders and Billers***

3 Credit Hours

Students will explore various legal and ethical concepts related to the field of Health Information Management and specific to medical coding. Health Insurance Portability and Accountability Act (HIPAA), Stark Law, and the False Claims Act will be examined as well as fraud, abuse, and compliance related to the submission of reimbursement claims. (3 lecture hours)

Prerequisite: HIT 1301, HIT 1302, and HLTHS 1110.

HIT 1403***Revenue Cycle Management***

3 Credit Hours

Students will explore tasks associated with revenue cycle management contributing to the capture, management, and collection of physician service reimbursement. Students will compare different outpatient and physician reimbursement methodologies, patient cost sharing models, the specifics of health insurance claim submission, and payment processes. (3 lecture hours)

Prerequisite: HIT 1301, HIT 1302, and HLTHS 1110.

HIT 1501***Health Insurance and Reimbursement***

3 Credit Hours

This course provides an in-depth understanding of the healthcare insurance and reimbursement landscape in the United States. Students will learn the basics of healthcare insurance, including private insurance, Medicare, and Medicaid. They will also explore the various reimbursement models used by healthcare providers including fee-for-service, capitation, and bundled payments. Students will learn about the components of a typical insurance contract including covered services, deductibles, coinsurance, co-pays, and how these elements affect the cost of healthcare for patients. (3 lecture hours)

Prerequisite: HIT 1301, HIT 1302, and HLTHS 1110.

HIT 1503***CPT and HCPCS Coding for Medical Billers***

2 Credit Hours

Students will learn about the Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) code sets used for physician services. Students will apply coding conventions and guidelines for the proper assignment of procedure codes. Students will explore the connection between diagnostics codes, medical necessity, procedure codes, and reimbursement. (2 lecture hours)

Prerequisite: HIT 1301, HIT 1302, and HLTHS 1110.

HIT 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (8 lab hours)

Prerequisite: Consent of instructor is required.

HIT 2110***Health Information Law and Compliance***

4 Credit Hours

This course introduces students to concepts of health law, legal proceedings, and patient consents. In addition, they will explore Health Insurance Portability and Accountability Act (HIPAA) and Administrative Simplification as it pertains to the legal health record and healthcare communications. Students will explore ethical issues surrounding the privacy, confidentiality and security of patient information in the health information field. (4 lecture hours)

Prerequisite: Admission to the HIT degree program is required.

HIT 2208***Advanced Medical Coding***

3 Credit Hours

In this course, students will combine their skills and knowledge from the CPT, Diagnostic and Inpatient Procedural Coding courses to code both inpatient and outpatient scenarios. Students will have the opportunity to use encoder software to aid in the application of codes. In addition, students will further evaluate coding resources such as Coding Clinic and CPT Assistant as they learn the intricacies of the coding process. Students will apply their coding knowledge as they audit previously coded scenarios for completeness and accuracy. (3 lecture hours)

Prerequisite: HIT 1107, HIT 1109, and HIT 1110. Admission to the HIT degree program is required.

HIT 2213***ICD-10-CM Coding for Inpatient Services***

3 Credit Hours

Study of nomenclature and classification of systems including coding and sequencing. Introduction to International Classification of Diseases (ICD)-10 coding principles. (2 lecture hours, 2 lab hours)

Prerequisite: ANAT 1500 with a grade of C or better or equivalent, or ANAT 1551 and ANAT 1552 both with a grade of C or better or equivalent, or ANAT 1571 and ANAT 1572 both with a grade of C or better or equivalent, and consent of instructor.

HIT 2217***Revenue Cycle Management***

4 Credit Hours

This course examines all aspects of the healthcare revenue cycle including patient registration, charge capture, coding, claim submission, insurance remittance, payments, and denials. Students will examine government and third-party payment models, and the relationship between clinical documentation and reimbursement. (4 lecture hours)

Prerequisite: HIT 1107, HIT 1109, and HIT 1110. Admission to the HIT degree program is required.

HIT 2240***Health Information Organizational Management and Leadership***

3 Credit Hours

Students are introduced to management and leadership skills relevant to operating a Health Information Management department. The concepts of organizational change, human resource strategies, performance improvement, financial management, workforce training, and the importance of cultural diversity will be reviewed. The importance of Quality Improvement in healthcare will be explored and students will examine different continuous improvement models. (3 lecture hours)

Prerequisite: Admission to the HIT degree program is required.

HIT 2250***Health Information Technology Capstone***

2 Credit Hours

This course provides students with Professional Practice Experience (PPE) and is intended to strengthen the academic experience. It enables students to obtain actual work experience and put academic theories into practice. (1 lecture hour, 2 clinical hours)

Prerequisite: Admission to the HIT degree program and Program Chair approval.

Health Sciences (HLTHS)

HLTHS 1100***Survey of Health Care Careers***

2 Credit Hours

An exploration of various allied health professions including diagnostic, medical information, rehabilitation, and patient care services through classroom and field experience. (2 lecture hours)

HLTHS 1101***Survey Health Care Careers: Field Study***

2 Credit Hours

An exploration of various allied health professions including diagnostic, medical information, rehabilitation, and patient care services through career shadowing. (2 lecture hours)

HLTHS 1106***Rehabilitation Aide***

2 Credit Hours

Overview of the role and necessary skills of a Physical Rehabilitation Aide. Exploration of modalities of physical rehabilitation including effects of aging, neuromuscular/neurological, musculoskeletal disorders and cardiopulmonary disease. (2 lecture hours)

Prerequisite: CNA, RN, LPN, Developmental Disabilities Aide, and Child Care Aide

HLTHS 1110***Biomedical Terminology***

3 Credit Hours

Students will be introduced to medical terms for body systems including word roots, prefixes, suffixes and abbreviations commonly encountered in the healthcare field. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HLTHS 1115***Pharmacy Technician***

5 Credit Hours

Overview of the role and fundamental skills necessary for a professional pharmacy technician. Exploration of pharmacy abbreviations, calculations, drug classifications, basic anatomy and physiology, disease states, drug interactions, and prescription processing is included. (5 lecture hours)

Prerequisite: High School diploma or GED.

HLTHS 1120***Introduction to Clinical Lab Science***

3 Credit Hours

Students will be introduced to the profession of clinical/medical laboratory science and to the clinical laboratory scientist's role in the delivery of health care. (2 lecture hours, 2 lab hours)

Prerequisite: HLTHS 1110 with a grade of C or better, or equivalent or consent of instructor.

HLTHS 1122***Basic Phlebotomy Techniques***

4 Credit Hours

Students will be presented with an overview of venipuncture and capillary puncture techniques for obtaining blood specimens for laboratory analysis. (3 lecture hours, 3 lab hours)

Prerequisite: HLTHS 1110 with a grade of C or better, or equivalent or concurrent enrollment in HLTHS 1110 or consent of instructor

HLTHS 1123***Phlebotomy for Health Professionals***

2 Credit Hours

Students will be presented with an overview of basic phlebotomy procedures with hands-on experience designed for health science students that are not seeking national certification. (1 lecture hour, 2 lab hours)

Prerequisite: HLTHS 1110 with a grade of C or better, or equivalent or concurrent enrollment in HLTHS 1110 or consent of instructor.

HLTHS 1124***Phlebotomy Clinical***

2 Credit Hours

Integrated clinical practice in the area of venipuncture and capillary puncture for the collection of blood specimens for diagnostic analysis. This course can only be taken on a pass/fail basis. (8 clinical hours)

Prerequisite: Consent of instructor is required.

HLTHS 1125***Phlebotomy Exam Review***

1 Credit Hour

Comprehensive review and update of phlebotomy practice, to include theory and procedures, as well as preparation for the certifying exam. This course can only be taken on a satisfactory/fail basis. (1 lecture hour)

Prerequisite: HLTHS 1124 with a grade of S or equivalent or concurrent enrollment in HLTHS 1124 or consent of instructor.

HLTHS 1126***Basic Non-Invasive Electrocardiography***

2 Credit Hours

Students will explore the anatomy and electrophysiology of the heart and perform basic cardiology procedures including pulse, blood pressure, and electrocardiogram (EKG). (1 lecture hour, 2 lab hours)

Prerequisite: HLTHS 1110 with a grade of C or better, or equivalent or concurrent enrollment in HLTHS 1110 or consent of instructor.

HLTHS 1127***EKG Clinical***

1 Credit Hour

Integrated clinical practice in the area of electrocardiography. Students obtain patient Electrocardiograms (EKG), Holter monitor, and the Treadmill Stress Test (TMST) via non-invasive electrocardiographic procedures. (4 clinical hours)

Prerequisite: HLTHS 1126 or qquivalent.

HLTHS 1128***Advanced Non-Invasive Electrocardiography (ekg)***

3 Credit Hours

Advanced electrocardiography (EKG) includes electrophysiology of the heart and identification of waveforms. Cardiac arrhythmias, cardiac disease states and cardiac medications included. Non-invasive cardiology testing to include Holter monitor and Treadmill Stress Testing (TMST). (2 lecture hours, 2 lab hours)

Prerequisite: HLTHS 1126 or equivalent or consent of instructor.

HLTHS 1129***Non-Invasive Electrocardiography Clinical***

1 Credit Hour

Integrated clinical practice in the area of electrocardiography to include electrocardiograms (EKG), Holter monitor testing, the Treadmill Stress Test (TMST), and telemetry via non-invasive electrocardiographic procedures. (4 lab hours)

Prerequisite: Consent of instructor is required.

HLTHS 1145***Health Care Collaboration***

3 Credit Hours

Examines changes in health care due to an aging population, availability of resources, and related factors. Explores the impact of national initiatives and regulating bodies on standards of practice. Determines the role of the interdisciplinary health care team as it impacts patient outcomes. Prepares students to collaborate within a multidisciplinary team. (3 lecture hours)

HLTHS 1800***Special Project***

1-3 Credit Hours

Special project courses in the discipline cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of the discipline concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit as long as different topics are chosen. (1 to 6 lab hours)

HLTHS 1820***Selected Topics***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

HLTHS 1821***Selected Topics***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

HLTHS 1840***Independent***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required

HLTHS 2235***Pharmacology for Medical Assisting***

3 Credit Hours

Study of prescribed drugs as they relate to medical assisting. Emphasis on legislation, common medications prescribed, dosage calculation, preparation, administration and adverse reactions. (3 lecture hours)

Prerequisite: Admission to program and MASST 2233 with a grade of C or better, or concurrent enrollment in MASST 2233 or consent of instructor

HLTHS 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HLTHS 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Hearing Instrument Dispensary Program (HIDP)

HIDP 1101***The Auditory Mechanism***

3 Credit Hours

The Auditory Mechanism is an introduction to anatomy and physiology, pathophysiology and embryology, and development of the auditory and vestibular systems. Normal aspects of auditory physiology and behavior over the lifespan will be addressed. (3 lecture hours)

HIDP 1102***Acoustics and Hearing Science***

3 Credit Hours

Acoustics and Hearing Science will provide an overview of the basic properties of sound. Topics will also include the structures and functions of the auditory mechanism and their involvement in a wide range of the auditory perceptual phenomena, and how disorders with these components may lead to impaired auditory function. (3 lecture hours)

Prerequisite: HIDP 1101 or concurrent enrollment in HIDP 1101 or consent of instructor.

HIDP 1103***Intro to Audiology & Clinical Audiometry***

4 Credit Hours

Students will be introduced to audiology and clinical audiometry. Auditory function and the basic principles of audiological assessment across the lifespan will be covered. (4 lecture hours)

Prerequisite: Admission to the program is required. HIDP 1102 with a grade of C or better or equivalent or consent of instructor.

HIDP 1104***Aural Rehabilitation Across the Lifespan***

3 Credit Hours

Aural Rehabilitation Across the Lifespan is an introduction to interventions aimed at minimizing the communication difficulties associated with hearing loss in people of all ages. (3 lecture hours)

Prerequisite: HIDP 1103 or concurrent enrollment in HIDP 1103 or consent of instructor.

HIDP 2101***Hearing Aids***

4 Credit Hours

This introduction to Hearing-Aid (HA) applications will include HA components, system, electroacoustic evaluation, and methods of prescribing HA gains to a person with a specified hearing loss. Basic and advanced HA signal processing will also be covered. (4 lecture hours)

Prerequisite: HIDP 1103 and HIDP 1104, both with a grade of C or better, or equivalent or consent of instructor.

HIDP 2102***Professional Issues and the Hearing Instrument Specialist***

3 Credit Hours

Professional Issues and the Hearing Instrument Specialist addresses a wide variety of issues pertinent to the professional life of the Hearing Instrument Specialist. (3 lecture hours)

Prerequisite: HIDP 2101 or equivalent or concurrent enrollment in HIDP 2101 or consent of instructor.

HIDP 2112***Clinical Practicum***

2 Credit Hours

Students will obtain supervised clinical experience in a hearing instrument dispensing clinic. This course can only be taken on a pass/fail basis. (4 lab hours, 16 clinical hours)

Prerequisite: HIDP 2101 and HIDP 2102, both with a grade of C or better, or equivalent or consent of instructor.

Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR)

HVACR 1100***Refrigeration Principles***

3 Credit Hours

Introduction to basic principles of refrigeration, basic laws of matter, fluids, gases, compression systems, refrigeration controls, refrigerants, and components. Also introduces service practices including the use of a refrigeration service manifold, recovery, vacuuming, and charging a system. (2 lecture hours, 2 lab hours)

HVACR 1105***Introduction to Safety, Materials and Equipment***

3 Credit Hours

Introduction to general safety practices, tool safety, the use and care of hand tools, specialty tools used in the Heating Ventilation, Air Conditioning, and refrigeration(HVACR) industry, pipe fitting basics, tubing and connection methods, brazing and soldering, and a variety of other basics needed to be successful in the HVACR industry. (2 lecture hours, 2 lab hours)

HVACR 1108***Refrigerant Certification***

1 Credit Hour

Environmental handling, refrigerant equipment and certification types are covered. Federal Government requires all individuals who open a system or container holding refrigerant to be certified. EPA refrigerant certification test given. (1 lecture hour)

HVACR 1110***Introduction to Electricity and Hvacr Controls***

3 Credit Hours

Practical study of electricity, electrical hardware, and electrical test instruments that are used in the heating, ventilation, air conditioning and refrigeration industry. Students will be introduced to: basic electricity, circuits, schematics, power distribution, electrical components, and motors. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HVACR 1112***Residential Refrigeration***

3 Credit Hours

Analysis of the operation of refrigeration systems, leak detection, leak repair, charging, component, replacements, schematic reading and troubleshooting domestic refrigerator and window air conditioning units. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, and HVACR 1110 or consent of instructor.

HVACR 1161***Introduction to Sheet Metal***

2 Credit Hours

Basic fitting layouts. Various types of seams, elbows and triangulation used in constructing various square and round fittings. Drawing and fabrication of the fittings are required. (4 lab hours)

HVACR 1180***Introduction to Heating***

5 Credit Hours

Gas combustion, venting, operation of a heating unit, electrical circuitry, zoning and accessories. Servicing, troubleshooting and repairing mechanical and electrical components, and proper installation of heating units. (4 lecture hours, 2 lab hours)

Prerequisite: HVACR 1110 or consent of instructor.

HVACR 1181***Heating Principles***

3 Credit Hours

Introduction to heating systems and equipment used in the Heating Ventilation, Air Conditioning, and Refrigeration (HVACR) industry. The course will introduce students to residential and light commercial forced-air systems, hydronic boilers, low pressure and high pressure steam boilers, electric heating, components, sequences of operation, and venting. (2 lecture hours, 2 lab hours)

HVACR 1820***Selected Topics***

1-5 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (0 to 5 lecture hours, 0 to 10 lab hours)

HVACR 1827***Selected Topics***

1 Credit Hour

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour)

HVACR 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (2 to 8 lab hours)

Prerequisite: Consent of instructor is required.

HVACR 2110***Facility Electrical Systems***

3 Credit Hours

Advanced facility electrical systems and controls. Cover electrical control and design of mechanical facility systems. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1110 with a grade of C or better, or equivalent, or consent of instructor.

HVACR 2180***Residential and Light Commercial Forced-Air Heating***

3 Credit Hours

Advanced course covering forced-air furnaces in residential and light-commercial applications. Covers installation, components, sequence of operation, maintenance, and electrical and mechanical troubleshooting of mid-efficiency, high-efficiency (condensing), and modulating forced-air furnaces. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1110 and HVACR 1181, both with a grade of C or better, or equivalent, or consent of instructor.

HVACR 2186***Hydronic Heating***

3 Credit Hours

Hot water heating systems including residential and light commercial applications. Piping systems and components are also covered. (2 lecture hour, 2 lab hours)

Prerequisite: HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better, or equivalent or consent of instructor.

HVACR 2187***Central Heating Plants***

3 Credit Hours

Theory of large boiler systems operation. Low and high pressure boilers, air handling equipment, heat exchangers, pumps, controls, water treatment, accessories, service and preventive maintenance are covered. Field trips to central heating plants are included. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1110 and HVACR 1181, both with a grade of C or better, or equivalent.

HVACR 2201***Residential Air Conditioning***

3 Credit Hours

Course includes residential air conditioning topics: Split air-conditioning systems, proper installation, evaluation, operation, servicing, repair of mechanical and electrical components, and air analysis. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, and HVACR 1110 with a grade of a C or better, or equivalent, or consent of instructor.

HVACR 2202***Commercial Air Conditioning***

3 Credit Hours

An advanced course covering commercial air-conditioning equipment and mechanical and electrical components of rooftop heating and cooling systems. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110 and HVACR 1181, all with a grade of C or better or consent of instructor.

HVACR 2205***Heat Pumps***

2 Credit Hours

Theory of the refrigeration cycle with respect to heat pumps and electrical heat. Includes mechanical and electrical operation, service, repair and proper installation. (1 lecture hour, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, and HVACR 1110 or consent of instructor.

HVACR 2210***Commercial Refrigeration***

5 Credit Hours

High, medium, and low temperature refrigeration application, operation of mechanical and electrical components, service and repair of electrical circuitry, and mechanical components, capacity controls, walk-ins, reach-ins, ice machines, supermarket refrigeration equipment, refrigeration piping, heat reclaim, and start-up procedures. (4 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, and HVACR 1110 or consent of instructor.

HVACR 2220***Installation***

3 Credit Hours

Installation of heating, air conditioning and refrigeration systems, piping, duct installation, electrical circuitry, and accessories. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better or consent of instructor.

HVACR 2225***Troubleshooting Systems***

3 Credit Hours

Systematic evaluation of system pressure, temperature, compressor efficiency, mechanical, and electrical components. Study of system performance on live equipment. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better or consent of instructor.

HVACR 2230***HVACR Control Systems***

3 Credit Hours

Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) control systems in commercial buildings: All-Air, All-Water, and Air-Water systems. Includes electric, pneumatic, electronic and an introduction to Direct Digital Control (DDC) controls. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better or consent of instructor.

HVACR 2231***Building Automation Control Devices***

3 Credit Hours

Examines building HVACR, lighting, security, access, plumbing, fire protection, elevator, voice-data-video systems. Content includes control components, hardware, operation, and signaling used in an integrated building automation system. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better or consent of instructor.

HVACR 2232***Energy Audits/Economics***

2 Credit Hours

Purpose, objectives and mechanics of the energy audit and economic processes include the audit procedures, heating, ventilation, air conditioning, and refrigeration systems, lighting, auxiliary equipment, energy conserving, cost-saving measures and analysis techniques that are necessary for evaluation of energy projects. After successful completion of the course, students are eligible to take the Environmental Protection Agency (EPA) Refrigerant Certification Test. (1 lecture hour, 2 lab hours)

HVACR 2233***Bldg Automation Systems With Object-Oriented Programming I***

3 Credit Hours

An introduction to Building Automation Control network (BACnet) and Local Operating Network (LON) protocols using Object-Oriented Programming (OOP) in the building automation industry. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better or equivalent or consent of instructor.

HVACR 2234***Bldg Automation Systems With Object-Oriented Programming II***

3 Credit Hours

Advanced Object-Oriented Programming (OOP) applied to Direct-Digital Controls (DDC) used in Building Automation Systems (BAS). Covers sequence of operation and control strategies of DDC controllers used in building automation systems. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 2230, HVACR 2231, HVACR 2233, and HVACR 2238, all with a grade of C or better, or equivalent or consent of instructor.

HVACR 2235***Building Commissioning***

3 Credit Hours

Explores the history and development of building commissioning. Includes types of commissioning, responsibilities of commissioning agents, instruments, building automation systems, types of reports, and functional testing. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 2230 and HVACR 2231, both with a grade of C or better, or equivalent or consent of instructor.

HVACR 2236***Central Cooling Plants***

3 Credit Hours

Theory of centrifugal, absorption and screw systems, minor repairs, service, preventive maintenance of pumps, air-handling equipment and controls are covered. Field trips to central cooling plants are included. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, and HVACR 1110 or equivalent.

HVACR 2237***Building Automation Systems Solutions***

3 Credit Hours

Explores different manufacturers of Direct Digital Controls (DDC) and systems used in building automation. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 2230, HVACR 2231, HVACR 2233, and HVACR 2238, all with a grade of C or better, or equivalent or consent of instructor.

HVACR 2238***Building Automation System Integration with Open Protocols***

3 Credit Hours

Examines control concepts and network data communication using LonWorks (local operating networks) and BACnet (building automation controls network) protocols. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better, or equivalent or consent of instructor.

HVACR 2240***Load Calculations and Duct Design***

5 Credit Hours

Techniques and procedures necessary to evaluate residential and commercial heat loss, heat gain and duct layout design. Heat transmission, infiltration, R-value, U-value, duct analysis, duct sizing, duct and register location and selection, and equipment sizing and selection. (4 lecture hours, 2 lab hours)

HVACR 2241***Industrial Air Conditioning Design***

3 Credit Hours

Design and application of industrial air conditioning, psychrometrics, load calculation, equipment selection, ventilation, duct design, pipe design, and automatic controls. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 2240 and MATH 1100 or MATH 1115 (or college equivalent) or qualifying score on the mathematics placement test, or consent of instructor.

HVACR 2242***Mechanical Systems***

3 Credit Hours

Introduces students to mechanical concepts of measurement, pipe fittings, pipe dimensions, shaft and pulley alignment, pumping concepts, pump maintenance, introduction to fluid dynamics, and systems integration of mechanical facility and industrial systems. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1105 with a grade of C or better, or equivalent or MANUF 1151 with a grade of C or better, or equivalent or WELD 1100 with a grade of C or better, or equivalent or consent of instructor.

HVACR 2250***System Balancing***

3 Credit Hours

Covers air-delivery equipment, duct distribution, duct pressure, cubic feet per minute, fluid flow, pumps, piping, refrigeration systems, testing instruments, and fine tuning of systems. (2 lecture hours, 2 lab hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better or consent of instructor.

HVACR 2260***Heating and Air Conditioning Contracting***

3 Credit Hours

Application of the HVACR design and implementation procedure, with emphasis on the equipment selection process, as outlined in Air Conditioning Contractors of America (ACCA) Manuals S and CS, Residential and Commercial Equipment Selection. Best practices for residential and light commercial HVACR contractors and designers, including identifying and incorporating recognized industry practices into business operations. (3 lecture hours)

Prerequisite: HVACR 1100, HVACR 1105, HVACR 1110, and HVACR 1181, all with a grade of C or better, and concurrent enrollment in MANAG 2210 or consent of instructor.

HVACR 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HVACR 2862***Internship (career & Technical Ed)***

2 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (10 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HVACR 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career & Technical Ed). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

History (HISTO)

HISTO 1110 (H2 901)

Foundations of the European World

3 Credit Hours

An examination of the development of Ancient and Medieval history to 1600. Themes such as the development of governments, religions, philosophies, the arts, and social and economic relationships will be analyzed. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Humanities (A.A.S., A.G.S.)

HISTO 1120 (H2 902)

Europe in the Modern World

3 Credit Hours

An examination of the development of intellectual, economic, and political characteristics of Europe in the modern world. Themes such as the Scientific Revolution and the Enlightenment, political revolutions, the rise of industry, and the world wars will be analyzed. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 1130 (S2 900)

History of the United States to 1865

3 Credit Hours

Survey of American history from the pre-Columbian era through the U.S. Civil War: peoples and origins, colonial development, revolution, establishment of the U.S. Constitution, Early Republic, Age of Reform, and Civil War. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

HISTO 1140 (S2 901)

History of the United States Since 1865

3 Credit Hours

Survey of U.S. history from Reconstruction to the present: Reconstruction, Industrial Revolution, Progressive Era politics, problems of 20th century including economic, political, cultural, international and social changes in the modern United States; including 20th century major wars, Depression era, and the Cold War era. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

HISTO 1160 (H2 907)

World Civilization Since 1300

3 Credit Hours

Surveys the history of the intellectual, political, social, economic, and cultural development of world societies from the fourteenth century to the present. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 1800

Special Project

1-4 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). This course may be taken four times for credit. (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 1820

Selected Topics

1-4 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 1824

Selected Topics in History

2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 1840

Independent Study

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

HISTO 2200***Middle East History Since 1500***

3 Credit Hours

Examines the history, culture, and identity of the people of the Middle East from 1500 to the present day. Topics include Middle Eastern cultural roots: the formation of distinctive identity; social, economic, cultural and political contributions; the unique issues and challenges of Middle Eastern people, and the role and legacy of their involvement in the history of the world. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

HISTO 2205 (H2 903N)***History of Asia***

3 Credit Hours

Surveys the political, social, economic, and cultural changes in Asia over the past 2,000 years, with a focus on the last 400 years. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2210 (S2 907N)***History and Culture of Africa***

3 Credit Hours

An examination of the history and cultures of Africa. Themes such as the influence of geography, ethnic and cultural diversity, European domination, independence movements, and contemporary economic and political issues will be analyzed. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2215 (S2 916N)***History and Culture of South Asia***

3 Credit Hours

A survey of the history and culture of South Asia from ancient civilizations to the present. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2220 (H2 903N)***History and Culture of China***

3 Credit Hours

Survey of the history of China from the Xia dynasty to the present, with emphasis on the cultural, political, social, and religious aspects of Chinese society. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2225 (H2 908)***History and Culture of Russia***

3 Credit Hours

Surveys the history and culture of Russia from earliest times to the present, including the adoption of Orthodoxy, the Mongol invasions, the development of monarchy, Westernization, the revolutions and the Soviet state and its collapse. The course includes the development of Russian cultural, political, and social institutions, as well as a discussion of the formation of its multi-ethnic and multi-cultural empire. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2230 (H2 908)***History and Culture of Japan***

3 Credit Hours

A survey of the history and culture of Japan from the Neolithic Era to the present. Emphasis will be placed on the political, social, economic, intellectual, religious, and artistic aspects of Japanese culture. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2235 (H2 903N)***20th Century World History***

3 Credit Hours

Examines the world in the twentieth century. Themes include imperialism, colonialism, war, revolution, totalitarianism, and globalization. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2237***History of Terrorism***

3 Credit Hours

Examines the history of terrorism in world history from the ancient world to today. Analyzes historical episodes of terrorism throughout the world in order to provide greater understanding of the phenomenon. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

HISTO 2240***History and Culture of Latin America***

3 Credit Hours

An examination and analysis of the development of Latin American civilization including: pre-Columbian and European roots, colonial structure, independence movements, creation of modern states, and relations with the United States. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2242 (S2 923D)***African-American History***

3 Credit Hours

Examines the history, culture, and identity of African-Americans in the United States from the colonial era to the present. Explores unique challenges faced by African-Americans, as well as their contribution to the history of the United States. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

HISTO 2245 (H2 908)***History and Culture of England***

3 Credit Hours

Overview of the major political, social, economic, intellectual, and cultural developments in the history of England from the Neolithic Age to the present. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 2250***World War II and the Holocaust***

3 Credit Hours

Examines the causes and course of World War II and the Holocaust, including: the rise of fascism; European, Japanese, and U.S. imperialism in Asia; the course of the war in Europe and Asia; the homefronts of the belligerent countries; and the march toward the Final Solution. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HISTO 2255***Work and Workers in United States History***

3 Credit Hours

Examines how and why the economic, social, and political conditions under which people work in the United States have changed over time. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Human Relations (A.A., A.S., A.A.S., A.G.S.)

HISTO 2260 (S2 901)***United States History Since 1945***

3 Credit Hours

An in-depth examination of the United States since 1945. Themes such as the growth of the presidency, economic and social developments, and the United States in the world arena will be analyzed. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

HISTO 2265***History of Illinois***

3 Credit Hours

Surveys Illinois history from the arrival of the first humans during the Paleolithic to the present. Examines the interaction of ecological, social, cultural, economic, and political factors in their impact on Illinois' historical evolution. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 2267***Native American History***

3 Credit Hours

Examines the history, culture, and identity of Native Americans in the United States from the pre-colonial era to the present. Explores the unique challenges faced by Native Americans, as well as their contributions to the history of the United States. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

HISTO 2270***History of Chicago***

3 Credit Hours

An examination of the urban, political, cultural, social, and economic history of Chicago. Themes such as industrialization, immigration, the rise of labor, and the impact of national politics will be analyzed. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 2800***Special Project***

1-4 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). (1 to 4 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 2820***Advanced Selected Topics***

1-4 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HISTO 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Horticulture (HORT)

HORT 1100 (AG 905)***Introduction to Horticulture***

3 Credit Hours

Principles and practices in the development, production and use of horticultural crops. Includes classification, structure, growth and development, environmental influences on horticultural plants, and vocational opportunities in the horticultural industries. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HORT 1101 (AG 904)***Soils and Fertilizers***

3 Credit Hours

Nature and characteristics of soils including physical, chemical and biological properties, soil origins, classification, soilless media and proper soil management. Examines the interrelationship between soils and fertilizers and the selection and use of fertilizers to meet plant nutritional needs. (2 lecture hours, 2 lab hours)

HORT 1105***Floral Design I***

3 Credit Hours

Principles and elements of floral design, with practice in creating basic floral designs and using proper techniques. Includes identification, care and handling of flowers. (2 lecture hours, 2 lab hours)

HORT 1107***Prescribed Burn Training***

1 Credit Hour

Explore prescribed burning as an essential practice in land management and ecosystem maintenance. Students will gain a comprehensive understanding of the ecological role of fire in sustaining healthy ecosystems and learn how to develop and implement effective prescribed burn plans. (2 lab hours)

Prerequisite: HORT 1109 or concurrent enrollment in HORT 1109.

HORT 1108***Chainsaw Safety and Operation***

2 Credit Hours

Explore chainsaw safety as an essential skill across various industries. This course provides a comprehensive understanding of chainsaw components, functions, and safe operating techniques. Students will learn to operate chainsaws safely, mitigate risk, and respond effectively to chainsaw-related emergencies. (1 lecture hour, 2 lab hours)

Prerequisite: HORT 1109 or concurrent enrollment in HORT 1109.

HORT 1109***OSHA 10-Hour Landscape Safety***

1 Credit Hour

Occupational Safety and Health Administration (OSHA) Landscape training for entry level workers and employers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in general industry and landscape. Includes information regarding workers' rights, employer responsibilities, and how to file a complaint. Students receive their 10 hour Card upon satisfactory completion of the course. (1 lecture hour)

HORT 1110***Applied Plant Taxonomy***

3 Credit Hours

Classification of plant families with an emphasis on plant material used in the horticulture industry. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1100 or consent of instructor.

HORT 1111***Landscape Design I***

3 Credit Hours

The process of residential landscape design, site analysis and practical solutions of typical landscape problems. Includes plant selection, graphic presentation and correct placement of materials in the residential landscape. (2 lecture hours, 2 lab hours)

HORT 1112***Landscape Maintenance***

3 Credit Hours

Principles and practices for sustainable maintenance of various landscape features for residential and commercial sites. Includes best practices and strategies for snow and ice management. (2 lecture hours, 2 lab hours)

HORT 1113***Landscape Construction***

3 Credit Hours

Principles and practices for sustainable construction and installation of various landscape features for residential and commercial sites. (2 lecture hours, 2 lab hours)

HORT 1114***Irrigation & Water Management***

3 Credit Hours

Principles and practices of landscape irrigation involving the use of water from proper system design and installation through maintenance and management. (2 lecture hours, 2 lab hours)

HORT 1115***Floral Design II***

3 Credit Hours

Continuation of the principles covered in Floral Design I. Introduces new styles and techniques and includes flower shop management. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1105 or equivalent or consent of instructor.

HORT 1116***Spanish for Horticulture***

3 Credit Hours

Develops basic conversational skills to communicate effectively in the horticulture industry. Emphasizes the ability to speak, understand, read, and write Spanish for safe, effective, and productive workplace interactions in a cross-cultural context. Role-plays and simulations will be used to prepare students to successfully engage with Spanish speakers in the green industry. For the beginning student. Credit cannot be earned for both SPAN 1116 and HORT 1116. (3 lecture hours)

HORT 1120***Landscape Lighting***

2 Credit Hours

Principles and practices for design and installation of low voltage landscape lighting for residential and commercial sites. (1 lecture hour, 2 lab hours)

HORT 1121***National Collegiate Landscape Competitions***

2 Credit Hours

This course prepares students for an experience in the National Collegiate Landscape Competition (NCLC). Students will gain hands-on-experience in various aspects of the landscape industry and practice safety. Students will also have an opportunity to gain awareness and demonstrate knowledge in the many facets of the landscape industry. (1 lecture hour, 2 lab hours)

Prerequisite: Students who sign up for this class must also sign up to attend the National Collegiate Landscape Competition.

HORT 1122***Pesticide Applicators Certification***

2 Credit Hours

Prepare students for Illinois Pesticide Applicators License exams. Course will cover chemical handling, mixing, calibration, and application of horticultural pesticides. Certification exam will be administered at the completion of the course by the Illinois Department of Agriculture. (2 lecture hours)

HORT 1125***Water Use/Conservation in the Landscape***

1 Credit Hour

Residential and commercial water management as it relates to understanding the intersection of the Plant-Soil-Water continuum. Includes best practices and strategies for sustainability. (1 lecture hour)

HORT 1130***Horticulture Business***

3 Credit Hours

Principles and practices of operating a horticultural business and operational procedures for dealing with the perishable and seasonal nature of horticulture. Includes trends, skills and career opportunities in the various disciplines within horticulture. (3 lecture hours)

HORT 1131***Landscaping for Wildlife***

1 Credit Hour

A study of landscape environments that offer food, water, and shelter/ nesting cover to local wildlife to help species compete in our changing environment. The role of native plants in sustaining wildlife will be emphasized. (1 lecture hour)

HORT 1135***Introduction to Green Roofs***

1 Credit Hour

The basics of green roof design, construction, and maintenance. Includes benefits of green roofs and a review of the products, plants, and growing media used in green roof applications. (1 lecture hour)

HORT 1140***Landscape Graphics***

2 Credit Hours

Drawing plans, section-elevations and perspectives for landscape design. Includes the use of pencils and markers for lettering, drafting and color renderings. (2 lecture hours)

HORT 1141***Sustainable Landscape Design***

1 Credit Hour

Sustainable landscape design and construction practices that minimize loss of natural resources. The economic benefits of sustainable practices will also be discussed. (1 lecture hour)

HORT 1142***Landscaping for Pollinators***

1 Credit Hour

Biology and ecology of Midwest pollinators. Landscape design and implementation for attracting pollinators including site selection, plant selection, and maintenance requirements. (1 lecture hour)

HORT 1145***Perennial Plant Communities I***

2 Credit Hours

Introduction to selecting perennial plants that grow well together and have similar maintenance requirements to create diverse, compatible, functional and beautiful gardens. Perennial plants are combined based on cost, maintenance and aesthetic appeal. (2 lecture hours)

HORT 1148***Introduction to Horticultural Therapy***

3 Credit Hours

Examines the practice of horticultural therapy (HT) as an effective and increasingly utilized treatment modality for sustaining or improving health. Explores the people-plant relationship, a horticultural therapist's techniques and methods, evidence-based research, and therapeutic gardens. The course will also highlight the numerous populations served by horticultural therapists and explore the multitude of benefits these populations receive from plant-rich, nature-immersive treatments. (3 lecture hours)

HORT 1150***Power Equipment Electrical Systems***

3 Credit Hours

Basic electrical theory, circuit construction, and digital multimeter use. Service information and wiring diagrams used in power equipment diagnosis. Power equipment starting and charging systems. Small engine ignition systems. Electrical wiring repair techniques. Diagnosis of power equipment electrical systems. Credit cannot be earned for both AUTO 1150 and HORT 1150. (2 lecture hours, 2 lab hours)

HORT 1151***2-Cycle Small Engine Repair/Maintenance***

2 Credit Hours

Introduces principles of 2-cycle engine-powered devices used in the landscape industry. Topics Include 2-cycle engine function, use of technical literature, disassembly, repair, and troubleshooting techniques. Credit cannot be earned for both AUTO 1151 and HORT 1151. (1 lecture hour, 2 lab hours)

HORT 1152***4-Cycle Small Engine Repair/Maintenance***

3 Credit Hours

Introduces principles of 4-cycle small engine repair and maintenance. Includes troubleshooting, failure analysis and problem solving skills to repair and rebuild small engines used in landscape, industrial, and agricultural applications. Credit cannot be earned for both AUTO 1152 and HORT 1152. (2 lecture hours, 2 lab hours)

HORT 1185***Arboriculture***

3 Credit Hours

Care and maintenance of trees and shrubs in the urban landscape. Includes Plant Health Care (PHC), environmental factors affecting plants, and proper and safe use of tools. (2 lecture hours, 2 lab hours)

HORT 1420***Cannabis and Industrial Hemp Production***

4 Credit Hours

Explores the fundamentals of cannabis biology and production. Emphasis on anatomy and physiology of the cannabis plant, hemp and marijuana cultivation, production, and processing methods. Various uses for and products of hemp and marijuana in the cannabis industry will be discussed. Professional opportunities in the cannabis industry will be explored. (4 lecture hours)

Prerequisite: HORT 1100 or concurrent enrollment in HORT 1100.

HORT 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). (1 to 6 lab hours)

HORT 1820***Selected Topics***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

HORT 1821***Selected Topics***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

HORT 1824***Selected Topics***

2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

HORT 1826***Selected Topics***

1 Credit Hour

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lab hours)

HORT 1827***Selected Topics***

1 Credit Hour

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour)

HORT 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

HORT 2200***Horticulture Field Study***

1-3 Credit Hours

This course will introduce students to fundamental horticultural concepts by travelling to a particular region. Course content will focus on the region's unique ecology, biodiversity, cultural insights, and sustainable growing methods. Immersive, field-based learning experiences will be enriched by lectures, seminars, and group presentations addressing the relevant research trends, management directives, and conservation initiatives shaping the long-term sustainability of the selected region. This course is repeatable up to three times as long as the region visited is different in each case. (1 to 3 lecture hours)

HORT 2211***Computer-Aided Drafting for Landscape***

3 Credit Hours

Introduction to computer-aided design and drafting utilizing landscape-specific DynaSCAPE software. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1111 or equivalent or consent of instructor.

HORT 2213***3D Landscape Design***

3 Credit Hours

Visual interpretation and presentation of landscape design concepts using 3D Design Software. Create 3D models and presentation materials for multiple phases of landscape design projects. (2 lecture hours, 2 lab hours)

HORT 2221***Plant Propagation***

3 Credit Hours

Principles and practices of sexual and asexual propagation of plants used in the horticulture industry. Includes work with seeds, cuttings, grafting, micropropagation, special structures and layering. (2 lecture hours, 2 lab hours)

HORT 2222***Introduction to Plant Breeding***

3 Credit Hours

Introduction to the principles, practices, and techniques of plant breeding. Examines modes of plant reproduction, breeding objectives, genetics, predictions, and selection. Course includes alternative techniques, practical considerations, and current developments in plant breeding. (3 lecture hours)

Prerequisite: HORT 1100 or equivalent or consent of instructor.

HORT 2225***Specialty Floral Design***

3 Credit Hours

Advanced floral design skills using principles, elements and techniques to create party, wedding and sympathy presentations. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1115 or equivalent or consent of instructor.

HORT 2226***Advanced Specialty Floral Design***

1 Credit Hour

Advanced floral design skills using principles, elements and techniques to create floral armatures, floral jewelry, wedding bouquets, prom corsages and boutonnieres, and advanced sympathy work. (2 lab hours)

Prerequisite: HORT 2225 or equivalent or consent of instructor.

HORT 2231***Turf Science and Management***

3 Credit Hours

Principles and methods of selecting, establishing and maintaining turf for residential lawns, parks, sports fields and golf courses. Includes cultural practices such as fertilization, irrigation and cultivation, as construction and renovation techniques. Also covers weed, insect and disease identification and control. (2 lecture hours, 2 lab hours)

HORT 2235***Landscape Estimating and Bidding***

3 Credit Hours

Fundamentals of creating landscape project estimates and bids to present to a client including reading landscape plans, take-off's, plant pricing, labor rates, measuring equipment, contingency, overhead costs and math calculations. (3 lecture hours)

HORT 2241***Landscape Plants I***

3 Credit Hours

Identification of woody ornamental trees, shrubs, vines and groundcovers common to northern Illinois with an emphasis on deciduous plants. Includes adaptability, cultural requirements and placement in the landscape. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1100 or consent of instructor.

HORT 2242***Landscape Plants II***

3 Credit Hours

Identification of woody ornamental trees, shrubs, vines and groundcovers common to northern Illinois with an emphasis on narrow and broad-leaved evergreens. Includes adaptability, cultural requirements and placement in the landscape. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1100 or consent of instructor.

HORT 2243***Ornamental Grasses***

2 Credit Hours

Identification and use of ornamental grasses in the landscape. Includes propagation, production and designing with native and non-native grasses. (2 lecture hours)

HORT 2244***Herbaceous Perennials***

3 Credit Hours

Identification, selection, design and maintenance of herbaceous perennials in the landscape. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1100 or consent of instructor.

HORT 2245***Perennial Plant Communities II***

1 Credit Hour

Design, installation and evaluation of perennial plant community gardens. Plant selections are based on time, cost and sustainability. (1 lecture hour)

Prerequisite: HORT 1145 or equivalent.

HORT 2246***Perennial Plant Communities Stewardship***

1 Credit Hour

Maintenance and evaluation of perennial plant community gardens. Emphasizes the arts and methods of becoming a skilled gardener. (2 lab hours)

Prerequisite: HORT 1145 and HORT 2245 or concurrent enrollment in HORT 2245, or consent of instructor.

HORT 2251***Plant Pathology***

3 Credit Hours

Detection, identification, and treatment of common plant diseases. Includes analysis of symptoms, selection of chemicals, preventive measures, and selection of disease resistant ornamental plants. (2 lecture hours, 2 lab hours)

HORT 2253***Greenhouse Operations and Procedures***

3 Credit Hours

Principles and practices of operating a commercial greenhouse. Includes types of greenhouse structures, greenhouse components, plant nutrition, greenhouse pests, crop scheduling, and business management principles for the greenhouse industry. (2 lecture hours, 2 lab hours)

HORT 2255***Greenhouse Crop Production***

3 Credit Hours

Principles and practices utilized in growing and maintaining greenhouse crops such as bench and pot mums, poinsettias, lilies, bulbs, azaleas, hydrangeas, foliage and miscellaneous pot crops. Includes hands-on experience with these crops. (2 lecture hours, 2 lab hours)

HORT 2256***Interior Plant Identification & Design***

2 Credit Hours

Identification, selection, cultural requirements, maintenance and propagation techniques of interior plants. Includes an introduction to professional interior landscaping, plant care and design techniques. (1 lecture hour, 2 lab hours)

HORT 2257***Bedding Plant Production***

3 Credit Hours

Principles and practices of bedding plant and plug production. Includes culture and identification of annual plant material such as petunias, marigolds, impatiens, begonias, geraniums and miscellaneous bedding plant varieties. Hands-on experience with these crops is provided. (2 lecture hours, 2 lab hours)

HORT 2261***Entomology for Horticulture***

3 Credit Hours

Detection, identification and management of local species of insects that damage plants. Includes selection and use of pesticides for insect control. (2 lecture hours, 2 lab hours)

HORT 2271***Landscape Design II***

3 Credit Hours

The design process with emphasis on problem solving and hardscape materials. Includes graphics, estimating, sales, and construction processes as they relate to design, installation and costs. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1111 and HORT 2241.

HORT 2280***Horticultural Therapy Programming & Techniques***

3 Credit Hours

This course explores Horticultural Therapy (HT) programing tailored to a wide range of client populations. Students will learn to effectively design horticultural therapy activity sessions that address the specific needs and abilities of diverse groups. Simulated client assessments and labs are incorporated into the course. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1148 or equivalent.

HORT 2281***Horticultural Therapy Management***

3 Credit Hours

Equips students with the skills to design, implement, manage, and assess horticultural therapy programs across various settings. Key factors and strategies for designing and sustaining successful indoor and outdoor therapeutic gardens are discussed. Students will explore private contracting business models, marketing strategies, and approaches to securing funding and resources for program support. Students will design a comprehensive program proposal that integrates all major program and site design, implementation, management, and evaluation aspects. (3 lecture hours)

Prerequisite: HORT 1148 and HORT 2280 or equivalent.

HORT 2282***Advanced Horticultural Therapy Techniques***

3 Credit Hours

Explores a variety of therapeutic techniques used in horticultural therapy. This course includes a lab component where students will have opportunities to apply classroom knowledge through relevant horticultural therapy activities. Topics include: motivational management, mindfulness, the power of awe, motivational interviewing, group dynamics, and therapeutic traits. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1148, HORT 2280, and HORT 2281 or equivalent.

HORT 2300***Introduction to Sustainable Urban Agriculture***

3 Credit Hours

Principles of sustainable agriculture for urban production. Includes the ethical, practical and scientific aspects of agricultural sustainability addressing economic, social and environmental impacts of food and urban farming. (2 lecture hours, 2 lab hours)

HORT 2301***Principles of Agroecology***

3 Credit Hours

Introduces ecological approaches to urban agriculture examining the interactions of crops with the environment and soil culminating in a whole systems perspective. (3 lecture hours)

Prerequisite: HORT 1100 or equivalent.

HORT 2303***Urban Agriculture Issues***

2 Credit Hours

Explores urban agricultural issues at the local, national, and global level focusing on growing food in urban areas. Includes the current state of urban agriculture, as both a social movement and as an aid in the implementation of urban environment sustainability. (2 lecture hours)

HORT 2304***Hydroponic and Aquaponic Production Systems***

3 Credit Hours

Introduction to concepts and practices of growing crops in hydroponic and aquaponic systems. (2 lecture hours, 2 lab hours)

HORT 2305***Local Foods***

2 Credit Hours

Explore the local food system, the importance of locally grown foods and the future impact of urban agriculture. (2 lecture hours)

HORT 2306***Introduction to Beekeeping***

2 Credit Hours

Principles and practices to start bee hives in your backyard. Includes topics on bee biology, hive management, queen bee purchasing, honey extraction, and bees in an urban setting. (2 lecture hours)

HORT 2308***Introduction to Composting***

1 Credit Hour

Introduces the cultural requirements, advantages, and benefits of composting systems. (2 lab hours)

HORT 2309***Fruit and Berry Production***

3 Credit Hours

Principles and practices of cultivating fruit and berry crops commercially. Includes fruit tree selection, planting and care for small-scale orchards or home gardens, pruning and training methods, and details on pest management. (2 lecture hours, 2 lab hours)

HORT 2310***Permaculture Design Certification***

4 Credit Hours

Foundations of permaculture design including ethics, principles, strategies, and techniques that can be employed for creating sustainable urban agriculture systems and projects. After completing this course, students earn the globally recognized Permaculture Design certificate aligned with the Permaculture Institute of North America core curriculum. (3 lecture hours, 2 lab hours)

HORT 2311***Cool Season Vegetable and Herb Production***

2 Credit Hours

Explores origin, crop requirements, harvesting, and management strategies for sustainable urban production of cool season vegetables and herbs. (1 lecture hour, 2 lab hours)

HORT 2312***Warm Season Vegetable and Herb Production***

2 Credit Hours

Explores origin, crop requirements, harvesting, and management strategies for sustainable urban production of warm season vegetables and herbs. (1 lecture hour, 2 lab hours)

HORT 2313***Mushroom Production***

2 Credit Hours

Explores methods of growing edible mushrooms including culture, maintenance, substrate preparation, composting, spawn generation techniques, inoculation methods, harvesting, and pest and disease management. (2 lecture hours)

HORT 2800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit. (1 to 6 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

HORT 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HORT 2863***Internship (Career & Technical Ed)***

3 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 225 clock hours for three semester credit hours. (15 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HORT 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Hospitality and Tourism (HOSP)

HOSP 1100***Introduction to the Hospitality Industry***

3 Credit Hours

Orientation to the hospitality industry, its history and magnitude, organization, challenges, and opportunities. Highlights interdependent nature of the public hospitality industry. (3 lecture hours)

HOSP 1101***Introduction to Travel & Tourism***

3 Credit Hours

Overview of one the world's largest industries, travel and tourism. Introduces students to major industry sectors such as transportation, hotels, food and beverage, destinations, career opportunities, professional organizations, and the impact of tourism on the economy. (3 lecture hours)

HOSP 1102***Introduction to World Destinations***

3 Credit Hours

Covers the seven continents of the world in general terms. Discusses basic geography terminology including map reading, time zones, and the location of major airports and cities. Examines companies serving these areas for tourism purposes. Analyzes cultural differences, weather and climate conditions from a traveler's perspective. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HOSP 1103***Principles of the Travel Industry I***

3 Credit Hours

Provides introductory level travel planning. Introduces students to industry tools, concepts, and techniques. Emphasis is on technology and logistics in all major industry sectors. (3 lecture hours)

Prerequisite: HOSP 1100 or 1101, or equivalent, or consent of instructor.

HOSP 1104***Principles of the Tourism Industry***

3 Credit Hours

Introduction to the characteristics of tourism concepts and systems. Tourism past and present is discussed building around why people want to be tourists. (3 lecture hours)

HOSP 1105***Introduction to Resort Management***

3 Credit Hours

Overview of resort management and operations. Review the history and the growth of resorts in the United States, expansion of resorts worldwide, and their operations and characteristics. (3 lecture hours)

HOSP 1106***Itineraries and Tour Packages***

3 Credit Hours

Covers the fundamentals of researching, designing, and packaging traveler itineraries. (3 lecture hours)

Prerequisite: HOSP 1100 or HOSP 1101, or equivalent, or consent of instructor.

HOSP 1107***Principles of the Travel Industry II***

3 Credit Hours

Provides intermediate level travel planning management. Emphasis is on effective practices for selling travel products, and essential travel agency functions such as communications, finances, commissions, and career building. (3 lecture hours)

Prerequisite: HOSP 1103 or equivalent or consent of instructor.

HOSP 1111***Front Office Operations***

3 Credit Hours

Supervisory management roles in the front office of a hotel or resort. Includes desk operations, reservations, sales, information management and uniformed services. Use of simulations, computers, role playing and hotel job shadowing. (2 lecture hours, 2 lab hours)

HOSP 1112***Hospitality Facilities Management***

3 Credit Hours

Introduction to the environments and functions in the housekeeping, maintenance, and engineering departments of today's hospitality environment. (3 lecture hours)

HOSP 1121***Supervision in the Hospitality Industry***

3 Credit Hours

Principles of effective human relations required by hospitality industry supervisory personnel. Practical skills for effective supervision including decision making, leadership roles, motivating personnel, recruiting and training employees, conflict resolution, delegation and effective communications. (3 lecture hours)

HOSP 1122***Food & Beverage for the Meeting Planner***

2 Credit Hours

Introduction to the food and beverage industry for the meeting/event professional. Emphasis will be placed on menu planning, service styles, nutrition, and special dietary restrictions. (2 lecture hours)

HOSP 1131***State and National Parks***

3 Credit Hours

In-depth study of State and National Parks in the United States. Covers the most popular National Parks as important tourist attractions. Itinerary planning is included. (3 lecture hours)

HOSP 1140***Quality Management of Service in the Hospitality Industry***

3 Credit Hours

Applies the services concept to a total management improvement system in the hospitality industry. Analysis includes ethics, practices, and case studies of leading hotel companies. (3 lecture hours)

HOSP 1151***Restaurant Service and Sales***

2 Credit Hours

Principles and techniques necessary in a dining room to perform proper food and beverage service, reflecting the variety of operations in the restaurant industry including responsible service of alcohol. Laboratory activities will provide students an opportunity to develop skills in proper cash handling, training with a point of sale system, and service styles to include: Russian, American, tapas and banquet service. The student will also learn principles of dining room management, and will receive BASSET certification upon completion of the class. (additional fee required) (4 lab hours)

HOSP 1152***Advanced Restaurant Service***

2 Credit Hours

This advanced level service management course includes fine dining and a la carte table service, with an emphasis on complex table and beverage techniques. Focus on customer service skills, responsible service of alcohol, cash handling, and technology systems in a lab setting. Students will analyze the service delivery system from the conceptual development stages to the final measurement of guest satisfaction. (4 lab hours)

Prerequisite: HOSP 1151 with a grade of C or better, or equivalent or consent of instructor.

HOSP 1153***The Science of Meetings***

3 Credit Hours

Introduction to the science involved in meetings. Emphasis will be placed on skills needed to leverage technology, prepare for an effective meeting, agenda planning, effective communications, and the differences between on-site, hybrid, and remote meetings. (3 lecture hours)

HOSP 1156***Introduction to Wedding Planning***

2 Credit Hours

Introduction to the logistical planning of weddings. The course will begin with inspiration and vision, and end with the wedding day. Highlights include: budgets, timelines, design elements, venues, food and beverage, media, entertainment, and more. Students will create an inspiration board as a culminating activity. (2 lecture hours)

HOSP 1161***Travel Geography & Culture-The Americas***

3 Credit Hours

Covers the location of major cities, airports, and sea ports and the air, land, and cruise companies serving North, Central, and South American destinations. Includes the location of important tourist attractions, unique land formations, climate data, the best time to visit the attractions, and how tour companies operate in these areas. Includes the impact of cultural differences, protocols, and acceptable standards of behavior. (3 lecture hours)

Prerequisite: HOSP 1106 or equivalent or consent of instructor.

HOSP 1162***Travel Geography & Culture-Europe And Africa***

3 Credit Hours

Covers the location of major cities, airports, and sea ports and the air, land, and cruise companies serving European and African destinations. Includes the location of important tourist attractions, unique land formations, climate data, the best time to visit the attractions, and how tour companies operate in these areas. Also includes the cultural differences, protocols, and accepted standards of behavior. (3 lecture hours)

Prerequisite: HOSP 1106 or equivalent or consent of instructor.

HOSP 1163***Travel Geography & Culture- Asia and Pacific***

3 Credit Hours

Covers the location of major cities, airports, and sea ports and the air, land, and cruise companies serving Asia and South Pacific destinations. Includes the location of important tourist attractions, unique land formations, climate data, the best time to visit the attractions, and how tour companies operate in these areas. Also includes the impacts of cultural differences, protocols, and accepted standards of behavior. (3 lecture hours)

Prerequisite: HOSP 1106 or equivalent or consent of instructor.

HOSP 1201***Introduction to Wine***

2 Credit Hours

An introductory course designed for the wine enthusiast. Examines wine history, basic wine terminology, fermentation, and an appreciation for all types of wine. (2 lecture hours)

Prerequisite: Students must be 21 years of age or older to enroll in this course.

HOSP 1202***Old World Wine Traditions***

3 Credit Hours

Exploration of the old world wine-producing regions: France, Germany, Italy, Spain, Portugal, Hungary, and Austria. Students will sample tastings, understand viticulture influences and practice technique that impact aroma, flavor, body and style of wine. Students will also learn the seven noble grapes. (3 lecture hours)

Prerequisite: Students must be 21 years of age or older to enroll in this course. HOSP 1201 or equivalent or concurrent enrollment in HOSP 1201.

HOSP 1203***New World Wine Advancements***

3 Credit Hours

Exploration of the new world wine producing regions: California, Oregon, Washington, Australia, New Zealand, South Africa, Argentina, and Chile through tastings, viticulture influences, and techniques that impact aroma, flavor, body and style of wine. (3 lecture hours)

Prerequisite: Students must be 21 years of age or older to enroll in this course. HOSP 1202 or equivalent or concurrent enrollment in HOSP 1202 or consent of instructor.

HOSP 1204***Wine and Food Pairing***

2 Credit Hours

Introduction to wine and food pairings through tastings, viticulture influences, and preparation techniques that impact aroma, flavor, body, and style of wine. Students will partner with International Cuisine class to pair wines for meals served in restaurant. Students will pair wine with food, serve wine to customers, and describe the wine to patrons. (2 lecture hours)

Prerequisite: Students must be 21 years of age or older. HOSP 1201 or equivalent or consent of instructor.

HOSP 1820***Selected Topics***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (1 to 3 lecture hours)

HOSP 1821***Selected Topics II***

1 Credit Hour

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (1 lecture hour)

HOSP 1822***Selected Topics III***

2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (2 lecture hours)

HOSP 1823***Selected Topics IV***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (3 lecture hours)

HOSP 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline, and methods of evaluation in coordination with, and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

HOSP 2000***Home Agency Operations***

3 Credit Hours

Provides the background necessary to create and manage a successful home-based travel advisor operation. The course builds a foundation of the knowledge, skills, steps, and technology required to be successful. (3 lecture hours)

Prerequisite: HOSP 1106 and HOSP 1107, or equivalent, or consent of instructor.

HOSP 2105***Spa & Recreational Management***

3 Credit Hours

Orientation to spa and recreational management within a resort. Highlights the role of wellness, relaxation, and entertainment to the guest experience. Emphasis is also placed on business relationship between spa and hotel property. (3 lecture hours)

HOSP 2130***Hospitality Industry Accounting***

3 Credit Hours

Application of basic accounting principles to hospitality industry establishments. Systems of daily reporting and the preparation of periodic accounting statements will be covered. (3 lecture hours)

Prerequisite: Recommended: ACCOU 1110 or ACCOU 2140.

HOSP 2131***Contracts and Risk Management for the Planner***

3 Credit Hours

Introduction to basic meeting and event contract law. Meeting and event planner contract terminology and risk associated with signing a contract. (3 lecture hours)

HOSP 2203***Professional Catering & Banquet Management***

3 Credit Hours

Planning, production, and execution of catered events and banquets. Topics covered include needs assessment, client relationships, operations, food production, technology, primary and auxiliary services, and post event activities. (3 lecture hours, 3 lab hours)

HOSP 2204***Wines of the World***

2 Credit Hours

Survey of the world's leading wines classified by type and suitability for particular use. Methods and techniques employed in purchasing, storing, and merchandising of wine will be discussed. Restaurant service staff's role in customer satisfaction is emphasized. (1 lecture hour, 2 lab hours)

Prerequisite: Students must be 21 years of age or older to enroll in this course.

HOSP 2210***Global Distribution Systems***

3 Credit Hours

Fundamental computer entries to complete an airline reservation within a computer system. Includes the major airline Global Distribution Systems (GDS), their operation, and value to travel agents, outside sales agents, home-based agents, and independent contractors. (2 lecture hours, 2 lab hours)

HOSP 2229***Revenues, Fares, & GDS***

3 Credit Hours

Introduces air travel terminology and documentation procedures including fares, tariffs, reservations, e-ticketing, and Global Distribution Systems (GDS) operation. Examines the interrelationships of accommodations, car rentals, ground handlers, rail travel, air travel, and tours. (2 lecture hours, 4 lab hours)

HOSP 2230***Law for the Hospitality Industry***

3 Credit Hours

Introduction to the legal principles that affect the hospitality industry. Special emphasis is placed on the rights, responsibilities, contract law, risk management, travel law, and liabilities of a manager in a hospitality enterprise. (3 lecture hours)

HOSP 2231***Airline Operations & Security Procedures***

3 Credit Hours

Operations and security procedures for domestic and international airlines. Topics include airport policies for passengers and baggage handling, procedures for transporting live animals, denied boarding compensation and other procedures. (3 lecture hours)

HOSP 2236***Cruise Industry Sales***

3 Credit Hours

Study of the Cruise Line Industry with analysis of contemporary cruising, marketing strategies, and documentation. Includes evaluation of types of ships, styles, sizes, itinerary selection, and destinations. Cruise Lines International Association (CLIA) cruise lines will be evaluated. Credit towards CLIA certification available. (3 lecture hours)

HOSP 2240***Tour Escorting, Planning and Operations***

3 Credit Hours

Wholesale and group tour operations, including the initiation and development of tours and vacation packages, generating group business via travel agency sales, marketing travel products to the retail industry, and reviewing documentation preparation. Basic theories and strategies related to tour escorting are covered. (3 lecture hours)

HOSP 2245***Tour Escorting, Planning, and Operations Practicum***

3 Credit Hours

Wholesale and group tour operations with hands-on experience. Students will prepare a comprehensive plan and implement an actual tour package to a vacation destination. Course culminates with student planned tour. (3 lecture hours)

Prerequisite: HOSP 2240 or equivalent or consent of instructor

HOSP 2250***Sustainable Tourism***

3 Credit Hours

Essential principles and concepts of sustainable tourism. Includes practical applications of the economic, environmental, and sociocultural context of sustainability. Integrates challenges and opportunities with sustainable tourism principles. Covers conventional mass and alternative tourism. (3 lecture hours)

HOSP 2253***Meeting and Event Management I***

3 Credit Hours

Meeting and special event planning including exhibits, trade shows, and conventions. Emphasis is on techniques of conference service, related food and beverage services, and sales management. (3 lecture hours)

HOSP 2254***Meeting & Event Management II***

3 Credit Hours

Intermediate principles in meeting and event planning including registration and housing, technology, greening, and international planning. (3 lecture hours)

Prerequisite: HOSP 2253 or equivalent or consent of instructor.

HOSP 2255***Special Event Management***

3 Credit Hours

The development of a special event from the conceptual design through completion. (3 lecture hours)

HOSP 2256***Wedding Planning Management***

4 Credit Hours

The Wedding Planning Management course will concentrate on the planning of a wedding and follow through to the implementation of the event. The course will highlight the history of marriage, cultural and ethnic diversity in weddings, consumerism, venues, destination weddings, and stress management. The students will apply this learning through a business plan, marketing strategies, and client relations. (4 lecture hours)

HOSP 2258***Gastronomy and Marketing in Hospitality***

4 Credit Hours

This course examines the relationships between gastronomy, tourism, and marketing for the hospitality industry. The rise in mainstream interest in food and drink has provided opportunities for new markets and businesses. Gastronomy will be studied from its history to its present contributions in the hospitality industry, eventually exploring futuristic trends in food and drink. This course will also prepare students for marketing goods and services within the hospitality industry using social, digital, and online reputation management practices. (4 lecture hours)

HOSP 2260***Hospitality Sales Management***

3 Credit Hours

Exploration of the responsibilities for hospitality sales managers. Emphasis will be placed on the skills required for sales managers including prospecting for new business, developing strong interpersonal skills, account management, overcoming objectives, and strategic problem solving. (3 lecture hours)

HOSP 2261***Beverage Management Operation***

2 Credit Hours

Overview of beverage operations management in the hospitality industry. Covers equipment, staffing, managing, marketing, purchasing and mixology. Hospitality industry regulations relevant to beverage operations will be discussed. (2 lecture hours)

HOSP 2262***Restaurant Beverage Service: Mixology***

2 Credit Hours

Essential skills of beverage service with emphasis placed upon the need for responsible beverage service. Includes the proper use of equipment and techniques used in beverage preparation. (1 lecture hour, 2 lab hours)

HOSP 2275***Hospitality Concept Design***

2 Credit Hours

Exploration of culinary and hospitality based businesses. Vision, product development, marketing, management and operations are all emphasized. (2 lecture hours)

HOSP 2280***Hospitality Marketing Management***

3 Credit Hours

Successful marketing principles employed in the hospitality industry. Demand variables, distribution channels, communications, promotions, research, packaging, collateral materials, pricing strategies, the marketing plan, and enhancing internal sales may be covered. (3 lecture hours)

HOSP 2285***Advanced Hospitality Operations***

3 Credit Hours

Study of the integration of hotel industry departments such as hotel operations, marketing, technology, human resource management, accounting, and purchasing. Special emphasis is placed on decision-making and problem solving models used in the hospitality industry. Current issues in the hospitality industry will also be discussed. (3 lecture hours)

Prerequisite: HOSP 1111 or equivalent or consent of instructor.

HOSP 2290***Advanced Meeting & Event Management - Capstone***

3 Credit Hours

The capstone course for meeting and event planning. This course will allow students implement the concepts learned from previous classes and plan an actual meeting. (6 lab hours)

Prerequisite: HOSP 2253 and HOSP 2254 or equivalent or consent of instructor.

HOSP 2820***Advanced Selected Topics***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (1 to 3 lecture hours)

HOSP 2821***Advanced Selected Topics II***

1 Credit Hour

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (1 lecture hour)

HOSP 2822***Advanced Selected Topics III***

2 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (2 lecture hours)

HOSP 2823***Advanced Selected Topics III***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (3 lecture hours)

HOSP 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HOSP 2862***Internship (Career & Technical Ed)***

2 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 150 clock hours for two semester credit hours. (10 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HOSP 2863***Internship (Career & Technical Ed)***

3 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 320 clock hours for three semester credit hours. (15 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HOSP 2864***Internship (Career & Technical Ed)***

4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour. (20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HOSP 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Human Services (HUMAN)

HUMAN 1100***Introduction to Human Services***

3 Credit Hours

An exploration of human service systems, career and academic pathways in the field, ethical principles that guide professional work, and models of service delivery. Requires 20 hours of service learning. (2 lecture hours, 2 lab hours)

HUMAN 1105***Esteem Building***

2 Credit Hours

An overview of cognitive behavioral interventions that increase self-esteem. The construct of self-esteem are explored through research and assessment tests. Specific interventions and appropriate utilization of these interventions for various age groups are discussed. (2 lecture hours)

HUMAN 1113***Interpersonal Dynamics***

3 Credit Hours

Overview of interpersonal skills that enhance therapeutic communication. Skills of empathy, respect, concreteness, genuineness, appropriate self-disclosure and confrontation are addressed. Assessment, interviewing and de-escalation techniques are introduced. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

HUMAN 1114***Contemporary Practice Models***

3 Credit Hours

An introduction to current treatment approaches. Each approach is viewed in its historical, cultural and philosophical perspectives. Students demonstrate each theoretical model and assess its potential for incorporation into their developing counseling style. (2 lecture hours, 2 lab hours)

HUMAN 1121***Cross-Cultural Communications***

3 Credit Hours

Introductory course exploring a variety of issues related to cultural competency in human services practice. The concepts of race, ethnicity, culture, class, religion, gender, sexual orientation, ethnocentrism, oppression, and power will be explored. Practical application of acquired awareness, knowledge, and skills will be stressed. (2 lecture hours, 2 lab hours)

Course types: Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

HUMAN 1125***Introduction to Addictions***

3 Credit Hours

An exploration of the concept of addiction, including historical and current attitudes toward drug use, diagnostic criteria, treatment models, and current trends in substance use and abuse. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HUMAN 1126***Psychopharmacology for Addictions Counselors***

3 Credit Hours

An introduction to the biochemical principles that affect the nature, action, and use of psychoactive drugs. (3 lecture hours)

HUMAN 1130***Psychedelic Mindview***

2 Credit Hours

An exploration of the role of psychedelic substances throughout history. Includes use by indigenous cultures, religious groups, and in psychotherapy. Current research on the use of psychedelics in substance abuse treatment and as a therapeutic adjunct. (2 lecture hours)

HUMAN 1140***Mental Health First Aid***

1 Credit Hour

Students will be introduced to basic concepts and strategies for assisting people experiencing a mental health crisis. (1 lecture hour)

HUMAN 1141***The Recovery Process***

3 Credit Hours

Describes the approaches used in community settings to help people establish and maintain recovery. Incorporates research across multiple disciplines, including mental health and addiction. Examines the role of treatment teams and recovery-oriented systems of care in supporting the recovery process. Explores pathways to recovery that have proven to be successful. (2 lecture hours, 2 lab hours)

HUMAN 1151***Recovery Support Specialist I***

3 Credit Hours

Provides foundational knowledge in the peer recovery support domains of advocacy and professional responsibility. Prepares students to work in the field of recovery support. Students who are pursuing their CRSS certification will need to provide verification to the Illinois Certification Board that they are in recovery from a mental health or substance use disorder. (3 lecture hours)

Prerequisite: None. Students should be aware that earning their Recovery Support Specialist credential (CRSS) requires them to be in recovery.

HUMAN 1152***Recovery Support Specialist II***

3 Credit Hours

Emphasizes the recovery support specialist skills of mentoring and peer support with a focus on building healthy relationships with those in recovery. Prepares students to begin an internship placement in a recovery setting. Students who are pursuing their CRSS certification will need to provide verification to the Illinois Certification Board that they are in recovery from a mental health or substance use disorder. (3 lecture hours)

Prerequisite: HUMAN 1151 with a grade of C or higher.

HUMAN 1160***Residential Child Care***

4 Credit Hours

Introduction to residential child care. Provides an overview of the settings and skills needed to assist children with emotional problems. Students will be introduced to the models of care utilized in outpatient and inpatient settings. (3 lecture hours, 2 lab hours)

HUMAN 1165***Dynamics of Child Abuse***

3 Credit Hours

An in-depth look at child neglect, and child sexual, physical and emotional abuse. Students investigate treatment issues surrounding each area. Victim and perpetrator treatment issues, prevention of abuse, and the long-term impact on the individual are discussed. Clinical issues that arise in children, adolescents and adults as a result of child abuse are covered. (3 lecture hours)

HUMAN 1170***Role of Advocacy in Human Services***

3 Credit Hours

Introduction to advocacy skills in human services. The course provides an overview of political and public advocacy issues. Essential skills and knowledge of legal processes for effective solutions are introduced. (3 lecture hours)

HUMAN 1175***Crisis Intervention***

3 Credit Hours

Introduction to clinical interventions utilized in crisis intervention. This course covers crises throughout the life cycle and situations such as medical and psychological traumas, post-traumatic stress disorder and professional burnout. (2 lecture hours, 2 lab hours)

HUMAN 1180***Interpersonal Violence***

3 Credit Hours

Students will be introduced to a comprehensive exploration of interpersonal violence as it relates to the human services field. Students will examine the history, nature, extent, causes, and consequences of interpersonal violence. Skills-building in direct service will be explored. (2 lecture hours, 2 lab hours)

HUMAN 1190***Introduction-Developmental Disabilities***

5 Credit Hours

Introduction to developmental disabilities. Course covers treatment history and present methods. Behavioral management programs, record maintenance, and facility and/or home maintenance techniques are explored. Students are introduced to working with an interdisciplinary team to provide care to a varied population. (4 lecture hours, 2 lab hours)

HUMAN 1800***Special Project***

1-3 Credit Hours

Special project course covers topics not otherwise covered by general education courses and other course in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to excess 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. (1 to 3 lecture hours)

HUMAN 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected Human Services topics with a specific theme indicated by course title listed in the college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

HUMAN 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

HUMAN 2200***Human Services Corrections Counseling***

4 Credit Hours

Provides a human services perspective on working with clients in the criminal justice system. Students will explore the legal issues pertinent to offenders. The functions of rehabilitation settings and clinical interventions provided in these settings are examined. (3 lecture hours, 2 lab hours)

HUMAN 2212***Group Dynamics***

3 Credit Hours

Introduction to leadership functions that affect collective behavior. Exploration of the dynamics of change as it applies to group functions. Analysis of group stages and differing theoretical models to conduct the group process are addressed. Ethical guidelines that govern the establishment and maintenance of groups are explored. (1 lecture hour, 4 lab hours)

HUMAN 2213***Grief Counseling***

3 Credit Hours

An overview of grief counseling, including history and research, normal and abnormal grief responses, and physiological and psychological implications of grief. Lab emphasizes acquiring skills in assisting others to successfully resolve grief issues. (2 lecture hours, 2 lab hours)

HUMAN 2214***Older Adult Care Management***

4 Credit Hours

Introduction to the basic components of older adult care management. Content covers the physical, emotional, social, psychological and cognitive aspects of aging. Course covers practical applications of interviewing and counseling families, managing client behavior, and assessing individual needs for appropriate treatment. (3 lecture hours, 2 lab hours)

HUMAN 2223***Field Skills***

1 Credit Hour

A review of core practice skills needed to prepare for the Human Services fieldwork experience. (1 lecture hour)

Prerequisite: HUMAN 1100, HUMAN 1113, HUMAN 1125, and HUMAN 2212, all with a grade of C or better, or equivalent.

HUMAN 2225***Addictions Counseling I***

3 Credit Hours

Students will focus on the methods and skills utilized in substance use disorder treatment. Prepares students who want to enter the field of addictions counseling. (2 lecture hours, 2 lab hours)

Prerequisite: HUMAN 1125 and HUMAN 1126, both with a grade of C or better, or equivalent or consent of instructor.

HUMAN 2226***Addictions Counseling II***

3 Credit Hours

Further development of methods and skills utilized in chemical dependence treatment. Prepares students who want to enter the field of addictions counseling. (2 lecture hours, 2 lab hours)

Prerequisite: HUMAN 2225 with a grade of C or better, or equivalent or consent of instructor.

HUMAN 2230***Grant Development for Non-Profit Organizations***

2 Credit Hours

Students will be introduced to basic concepts of the grant process, including how to identify funding prospects, determine funding requirements, understand grant guidelines, understand the basic steps in developing a sound grant proposal, and grant management. This class provides the learner with the tools to understand grants and their role in the fundraising schema of human services organizations. (2 lecture hours)

HUMAN 2240***Family Education and Treatment Models***

3 Credit Hours

Overview of the effects of family interaction on individual growth and change. The impact of crises such as divorce, addictions, death, troubled children, and/or aging parents on the family system is explored. Diverse family systems are also introduced. Clinical approaches as well as preventive interventions with families are explained. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

HUMAN 2251***Fieldwork I***

4 Credit Hours

Fieldwork is a program capstone for students from all certificate and degree options in Human Services. Each student will complete 300 hours of practicum experience under supervision at an approved agency. The course also addresses skills development and ethical practices. (1 lecture hour, 18 clinical hours)

Prerequisite: Consent of instructor.

HUMAN 2252***Fieldwork II***

4 Credit Hours

A continuation of Human Services 2251 for addictions counseling students seeking their CADC certification. This requires an additional 300 hours of supervised practicum experience beyond Fieldwork I. (1 lecture hour, 18 clinical hours)

Prerequisite: HUMAN 2251, or equivalent and consent of instructor.

HUMAN 2279***Ethics & Legal Issues in Human Services***

3 Credit Hours

Students will explore the Human Services code of ethics and examine legal issues encountered by professionals in the field. (3 lecture hours)

HUMAN 2280***Addictions Counseling III***

3 Credit Hours

An advanced skills course for undergraduate students pursuing certification in addictions counseling. Prepares students to begin a practicum at an addictions treatment agency. (2 lecture hours, 2 lab hours)

Prerequisite: HUMAN 2226 with a grade of C or better, or equivalent or consent of instructor.

HUMAN 2284***CADC Exam Preparation***

1 Credit Hour

A review of basic concepts and information presented in the Addictions Counselor Training Program that will guide the individual preparation for the Illinois Alcohol and Other Drugs of Abuse Professional Certification Association (IAODAPCA) certification exam. Test taking strategies will be reviewed. This course may be taken four times for credit. (1 lecture hour)

HUMAN 2286***Assessment of Clinical Issues for Veterans***

4 Credit Hours

Examines the clinical needs of active military and veteran populations. Explores military culture and experience, sources of stress, trauma, incidence of traumatic brain injury (TBI), Post-traumatic Stress Disorder (PTSD), and assessment measures and tools. (4 lecture hours)

HUMAN 2288***Treatment Approaches for Veterans And Families***

4 Credit Hours

Presents best practices in the diagnosis and treatment of behavioral and mental health challenges experienced by veterans and their families. It also explores practical strategies for continued recovery and wellness. Students will practice skills in simulated group and individual settings. (4 lecture hours)

HUMAN 2840***Experimental Pilot Class***

1-6 Credit Hours

Exploration and analysis of topics within the discipline. This course is used to pilot a proposal for a permanent discipline course. This course may be taken four times for credit as long as different topics are selected. (2 to 12 lab hours)

Prerequisite: Consent of instructor is required.

HUMAN 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HUMAN 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Humanities (HUMNT)

HUMNT 1101 (F9 900)***Introduction to Humanities: The Arts***

3 Credit Hours

An interdisciplinary exploration of creativity as expressed in music, literature, and/or the visual and performing arts. Multiple cultural traditions may be considered. Emphasis is on the student's consideration and development of their own personal aesthetic values within an historical or thematic framework. Attendance or participation at cultural events and an individual project may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

HUMNT 1102 (H9 900)***Introduction to Humanities: Ideas and Values***

3 Credit Hours

An exploration of the nature of mankind, primarily as reflected in the disciplines of philosophy, history, literature and religious studies. Particular attention is paid to individual and communal identities, to questions of values, and to the struggle for personal fulfillment. Emphasis on students' consideration and development of their own personal, moral and ethical values. Attendance at outside events may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1103 (H9 901)***Introduction to World Mythology***

3 Credit Hours

Exploration of the significant myths, legends, and folktales of world cultures, with an emphasis upon the various ways in which they function in culture. Examines myth not only as a cultural artifact reflective of the values and ideals of a culture, but also as a source of universal themes and values in literature, drama, art, music, and film. Participation at outside activities may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1104 (HF 907D)***Women in Arts: Cultural and Artistic Expressions of Gender***

3 Credit Hours

An interdisciplinary study of women throughout the world and their contributions to the arts and culture through the humanities. This course explores artistic creations as well as reflections of gender identity across place and time. With analyses informed by feminist and gender theories, at least three of the following—art, architecture, music, literature, history, philosophy, and the performing arts—will be studied in their artistic, historical, and cultural contexts with an eye towards discerning how gender informs their creation and message. Attendance at outside events may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1105 (HF 904N)***Humanities Beyond the U.S. & Europe***

3 Credit Hours

Interdisciplinary survey of the significant intellectual and artistic achievements of several religious and/or geographic cultures beyond the United States and Europe, such as Asian, African, South American, and other indigenous cultures, and Islamic. The course will survey selected works of literature, philosophy, visual art, music and other performing arts from at least four of these cultures, as well as offer a comparative examination of their values, motifs, and aesthetics with those of cultural expression in the U.S. and Europe. Attendance at outside events may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

HUMNT 1107***Gender and Identity***

3 Credit Hours

An interdisciplinary course that explores gender and its role as an organizing principle of society. Students will consider historical and current issues and questions focusing on the meaning of gender in society and how it is constructed, perceived, and represented both here in the U.S. and abroad. Relying on the various waves of feminist analyses and critical analyses drawn from Gender Studies, social institutions will also be analyzed through other disciplines (such as sociology, history, philosophy, the arts, the performing arts, and literature) as appropriate. Students will be asked to reflect and engage with debates in these fields and to determine how these issues affect their own lives. Attendance at outside activities may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1110 (HF 906D)***The Arts and Cultural Diversity***

3 Credit Hours

An exploration of human relations and cultural diversity in the contemporary United States and their roots in African, Native American, Asian and Latin American civilizations. Creative artworks in the humanities, such as literature, film, art, music, photography, dance and drama, serve as catalysts to look in-depth at the topics of race, ethnicity, gender and other issues related to improving human relations. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

HUMNT 1120 (H9 900)***Introduction to Medical Humanities***

3 Credit Hours

An interdisciplinary survey course that will draw on the arts, social sciences, philosophy, religion, and history to focus on how we frame and are framed by medical practices and interactions. This course will also consider meanings attached to illness and health and to how these meanings are narrated and given representation across time and through the Humanities. Students will consider cultural influences that drive medical narratives and will be asked to analyze medical narratives from a humanist perspective. Attendance at outside events may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1150 (H9 900)***Intersections of Humanities, Math, And Science***

3 Credit Hours

An introductory Humanities course which explores the interplay among the humanities, math, and science. This course will consider the shifting views of science and math as integral to the production of the arts and will also focus on the ways writers and other artists have made sense of scientific and mathematical advances using the humanities to articulate discoveries and their impact on culture and the world at large. Both Western and non-Western perspectives may be considered. Relying on some or all of the following-theater, film, literature, comics, architecture, philosophy, history, music, painting, photography, biography-the mutual influences of the arts, math, and science will be explored. No prior math or science courses are required but students should be prepared for college level studies. This Humanities course will not fulfill a Math or Science requirement. Attendance at outside events may be required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1820***Selected Topics I***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college Class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1824***Selected Topics in Humanities***

2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 2210***Leadership Development***

3 Credit Hours

Development of leadership ability through an investigation of leadership styles, group dynamics theory and experiential exercises. Students also develop a personal philosophy of leadership demonstrates an awareness of the moral and ethical responsibilities of leadership. The opportunity to develop essential leadership skills through classic case studies, the Great Books and other classical and contemporary literature, and film. There is a service-learning component to this course. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 2240***Creating a Literary Journal: Prairie Light Review***

3 Credit Hours

An experiential course to produce a college district literary arts journal, applying editorial, production, and publication techniques. Topics include acquisitions, copy editing, layout design, and marketing aspects of publishing. (3 lecture hours)

Prerequisite: Course requires reading placement category one.

HUMNT 2800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline, while building on academic knowledge and skills acquired in introductory-level classes. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 2820***Select Topics II***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

HUMNT 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HUMNT 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HUMNT 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HUMNT 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Interior Design (INTER)

INTER 1110***Introduction to Interior Design***

3 Credit Hours

Interior design survey course including hand drafting skills. Students will explore interior design careers, design elements and principles, color theory, human scale, the design process, and integrate critical thinking strategies into design solutions. (2 lecture hours, 2 lab hours)

INTER 1125***Sustainable Design***

3 Credit Hours

Introduction to sustainable design as a foundation for interior design applications. Content includes vocabulary, design methods, local and national resources, professional organizations and governmental Leadership in Energy and Environmental Design (LEED) standards. (2 lecture hours, 2 lab hours)

INTER 1135***Visualization Techniques***

3 Credit Hours

Techniques and tools to aid in graphically visualizing interior design ideas and concepts in the form of sketches, renderings, and presentations. Topics include perspective drawing and sketching, as well as computer-aided rendering and 3D modeling. Students will be engaged with hands-on techniques, peer critique sessions, and lectures. (2 lecture hours, 2 lab hours)

INTER 1150***History of Interior Design***

3 Credit Hours

Survey of design history including architecture, interiors, furniture, and accessories in world civilizations throughout history. Students will relate social and cultural influences of the period and place to interior design. (3 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category Three.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

INTER 1170***Environmental Materials and Applications***

3 Credit Hours

Survey course on interior design materials and resources and their application in the built environment, with a focus on sustainable design. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1110 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 1190***Interior Design Codes and Standards***

3 Credit Hours

Codes, standards and regulations for interior design applications are the focus of this course. Students will apply codes to projects insuring accessibility and protection of health, safety and welfare for all users. (3 lecture hours)

Prerequisite: INTER 1110 or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 1212***Computer-Aided Interior Design I***

3 Credit Hours

Introduction to computer-aided design and drafting techniques. Course covers two-dimensional drawing and printing for interior design applications. (2 lecture hours, 2 lab hours)

INTER 1821***Selected Topics***

1-3 Credit Hours

Guided study and exploration of subjects not covered by other courses in the discipline. Class offerings may use such resources as recognized experts, lectures, library research, selected readings and/or field trips. This course may be taken four times for credit if different topics are selected. (1 to 3 lecture hours, 2 to 6 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category Three.

INTER 2110***Studio Foundation***

3 Credit Hours

Preparatory course for design studio classes. Content includes space planning, critical thinking skills, universal design principles, and preliminary portfolio development. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1110 with a grade of C or better, or equivalent or consent of instructor.

INTER 2120***Furniture Specification and Budgets***

2 Credit Hours

Overview of furniture specifications and budget considerations for residential and commercial interior design applications. Students will develop a working knowledge of ordering and pricing methods used in the interior design industry. (1 lecture hour, 2 lab hours)

Prerequisite: INTER 1212 and INTER 2110, both with a grade of C or better, or equivalent. This course requires Reading Placement Test - Category Three.

INTER 2135***Advanced Visualization Techniques***

3 Credit Hours

Advanced graphic visualization techniques are developed using computer software for enhanced presentations. Techniques learned in this class will enhance students' future projects and employable job skills. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1135 and INTER 1212, all with a grade of C or better, or equivalent, or consent of instructor.

INTER 2150***Historical Styles Design Studio***

3 Credit Hours

Studio course that focuses on creating projects based on various historical styles. Students will utilize historical research and develop current furnishing and material resources. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1150, INTER 1170, INTER 1212, and INTER 2110 all with grade of C or better, or equivalent, or consent of instructor.

INTER 2212***Computer-Aided Interior Design II***

3 Credit Hours

Advanced computer-aided drafting, presentation, and modeling techniques. Coursework includes two and three dimensional drafting and graphic project presentations for interior design applications. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1212 with a grade C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2215***Building Information Modeling for Interior Design***

3 Credit Hours

Computer drafting of interior spaces utilizing BIM (Building Information Modeling) software. Students will create multi-sheet projects including 3-D renderings. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1212 with a grade C or better, or equivalent or consent of instructor.

INTER 2216***Virtual Reality for Interior Design***

3 Credit Hours

Introduction to virtual, augmented, and mixed reality technologies, with an emphasis on designing and developing interactive virtual reality experiences. The course will cover the history of virtual reality, fundamental theory, interaction techniques, and specific application areas. (2 lecture hour, 2 lab hours)

Prerequisite: At least one of the following: INTER 2135, INTER 2213, INTER 2215, INTER 2515, or consent of instructor (for professionals).

INTER 2220***Interior Systems and Details***

3 Credit Hours

Overview of building systems and construction as applied to interior design projects, including National Kitchen & Bath (NKBA) Standards. Design and drafting of interior architectural details and their integration into the built environment. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1170 and INTER 1212, both with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2311***Lighting I***

3 Credit Hours

Lighting design fundamentals for natural and artificial light sources. Course will also cover specifications and working drawings for residential and commercial interior lighting applications. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1110, INTER 1125, and INTER 1212, all with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2312***Lighting II***

3 Credit Hours

Advanced design studio that incorporates residential and commercial lighting environment and technology applications. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 2311 or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2410***Residential Design Studio***

3 Credit Hours

Design studio course with emphasis on the development and presentation of residential design projects. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1135, INTER 1190, INTER 2110, INTER 2220, and INTER 2311, all with a grade of C or better, or consent of instructor.

Course requires Reading Placement Test Score-Category Three.

INTER 2420***Healthcare Design Studio***

3 Credit Hours

Advanced studio course that focuses on the healthcare design area of practice. A variety of projects will be developed utilizing evidence based design principles that benefit patients, family, visitors, and staff. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1135, INTER 1190, INTER 2110, INTER 2220, and INTER 2311, all with a grade of C or better, or equivalent or consent of instructor.

INTER 2430***Contract Design Studio***

3 Credit Hours

Design development studio course with emphasis on retail and restaurant projects. Students in this course should produce portfolio quality projects. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1135, INTER 1190, INTER 2110, INTER 2220 and INTER 2311; all with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2440***Office Design Studio***

3 Credit Hours

Practice based studio course in sustainable corporate office design. Students implement a project from space planning through contract documents. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1135, INTER 1190, INTER 2110, INTER 2220, and INTER 2311, all with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2450***Senior Design Studio***

3 Credit Hours

Capstone course of advanced research and analysis of selected projects utilizing reality based end-user interior environment program requirements which emphasize the interrelationship of codes, regulations, standards, material specifications, and sustainable interior applications and design solutions. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 2532 or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2511***Kitchen and Bath Design I***

3 Credit Hours

Introductory design studio covering the design and execution of kitchen and bath projects. Students learn and incorporate National Kitchen and Bath Association (NKBA) standards. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1135, INTER 1170, INTER 1212, and INTER 2220, all with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2512***Kitchen and Bath Design II***

3 Credit Hours

Advanced design studio focusing on custom projects, project timelines, and business considerations. Course prepares students to work in the kitchen and bath industry. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 2511 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2515***Kitchen and Bath Computer Applications***

3 Credit Hours

Introduction to drafting and design computer software used primarily in the kitchen and bath industry. Course includes 2D production drawings and 3D presentation renderings. (2 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Three.

INTER 2520***Furniture Design***

3 Credit Hours

Exploration of the furniture industry, including custom and art furniture. Furniture fabrication materials and techniques are examined. Students will design an original piece of furniture. (2 lecture hours, 2 lab hours)

Prerequisite: INTER 1110, INTER 1135, INTER 1170, and INTER 1212, all with a grade of C or better, or equivalent, or consent of instructor. Course requires Reading Placement Test Score-Category Three.

INTER 2680***Professional Practice and Ethics***

3 Credit Hours

Pre-graduation course to prepare students for professional interior design employment. Business practices, ethics, regulations, organizations, and professional testing will be covered. (2 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Three. INTER 2410, INTER 2420, INTER 2430, or INTER 2440 with a grade of C or better, or equivalent or consent of instructor.

INTER 2710***Portfolio Review***

2 Credit Hours

Capstone course to refine a student's portfolio of work for printed and media applications. (1 lecture hour, 2 lab hours)

Prerequisite: Course requires Reading Placement Test Score-Category Three. Take TWO from the following courses: INTER 2410 with a grade of C or better, or equivalent; INTER 2420 with a grade of C or better, or equivalent; INTER 2430 with a grade of C or better, or equivalent; INTER 2440 with a grade of C or better, or equivalent; or consent of instructor

INTER 2821***Advanced Selected Topics***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. Topics for this course are geared for graduates or design professionals seeking professional development opportunities. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours, 2 to 6 lab hours)

INTER 2860***Interior Design Kitchen/Bath Internship***

2 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum number of hours to satisfy NKBA (National Kitchen and Bath Association) accreditation requirements.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

INTER 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

INTER 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

INTER 2871***Internship-Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Interpreting (INTP)

INTP 2104***Introduction to American Sign Language Interpreting and Ethics***

3 Credit Hours

Introduction to the Registry of Interpreters for the Deaf (RID) and the Code of Professional Conduct (CPC). The role of the sign language interpreter in various work settings will be explored. The history and current models of interpreting will be discussed. (3 lecture hours)

Prerequisite: SIGN 2102 or equivalent, or concurrent enrollment in SIGN 2102, or consent of instructor.

INTP 2105***ASL/English Skills Development***

4 Credit Hours

Developing and mastering the intralingual skills needed to effectively translate from the source language into the target language. (4 lecture hours)

Prerequisite: Admission to the program is required. SIGN 2103 and INTP 2104, both with a grade of C or better, or equivalent; corequisite enrollment in INTP 2106; and consent of instructor.

INTP 2106***Cognitive Processing ASL/English***

4 Credit Hours

Introduction to cognitive processing skills essential to the interpreting process. These include memory pattern recognition and inferences, delayed repetition, comprehension, immediate repetition, acuity and discrimination, word and phrase pattern inference, and multitasking. (4 lecture hours)

Prerequisite: Admission to the program is required. SIGN 2103 and INTP 2104, both with a grade of C or better, or equivalent, and corequisite enrollment in INTP 2105.

INTP 2107***Translating from ASL to English/English to ASL***

4 Credit Hours

Prepares students with basic translation skills enabling them to progress in faithful message transfer and rendering. The focus is on message analysis, transfer, and reformulation in American Sign Language (ASL) and English. (4 lecture hours)

Prerequisite: INTP 2105 and INTP 2106, both with a grade of C or better, or equivalent and consent of instructor.

INTP 2108***Consecutive & Simultaneous Interpreting***

4 Credit Hours

Requires students to master a high level of interlingual skills that are essential for simultaneous and consecutive interpreting. They will demonstrate a competency of comprehending, transferring, and reformulating the message. (4 lecture hours)

Prerequisite: INTP 2107 with a grade of C or better, or equivalent; corequisite enrollment in INTP 2109; and consent of instructor.

INTP 2109***Educational Interpreting and Transliterating***

3 Credit Hours

Advanced instruction in the concepts and skill sets necessary to work in primary, secondary, and post-secondary settings as educational interpreters and support service providers. Students will learn to understand deafness and how to work as part of a Deaf Education Team. (3 lecture hours)

Prerequisite: INTP 2107 with a grade of C or better, or equivalent and corequisite enrollment in INTP 2108.

INTP 2110***American Sign Language Interpreter Practicum***

2 Credit Hours

Applies ASL interpreting skills in a variety of settings. Includes off-campus assignments with a mentor and a weekly colloquium. Students must be available during the day and evening for interpreting assignments. Test preparation will also take place during this course. (4 lab hours)

Prerequisite: INTP 2108 with a grade of C or better, or equivalent and INTP 2109 with a grade of C or better, or equivalent and consent of instructor.

Italian (ITALI)

ITALI 1100***Civilization and Culture of Italy***

3 Credit Hours

Introduction in English to the culture, geography, history, economics, political institutions, literature, music, art, architecture, and educational system of Italy. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ITALI 1101***Elementary Italian I***

4 Credit Hours

Develops the ability to speak, understand, read, and write Italian in a cultural and communicative context. For beginning students with no prior experience in the language. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ITALI 1102***Elementary Italian II***

4 Credit Hours

Continues the development of the ability to speak, understand, read, and write Italian in a cultural and communicative context. For students who have successfully completed ITALI 1101 or equivalent, or one year of high school Italian, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ITALI 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course descriptions, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ITALI 2201***Intermediate Italian I***

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write Italian in a cultural and communicative context. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed ITALI 1102 or equivalent, or two years of high school Italian, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ITALI 2202 (H1 900)***Intermediate Italian II***

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write Italian in a cultural and communicative context. Includes reading and discussion of modern texts, short films, conversation, composition, grammar review, and cultural activities. For students who have successfully completed ITALI 2201 or equivalent, or three years of high school Italian, or consent of instructor. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ITALI 2251***Conversation and Composition I***

3 Credit Hours

Develops students' listening comprehension, speaking, reading, and writing skills and expands knowledge of the culture and civilization of Italy. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed ITALI 2202 or equivalent, or four years of high school Italian, or consent of instructor. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ITALI 2252***Conversation and Composition II***

3 Credit Hours

Develops students' listening comprehension, speaking, reading, and writing skills and expands knowledge of the culture and civilization of Italy. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed ITALI 2251 or equivalent, or five years of high school Italian, or consent of instructor. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

ITALI 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ITALI 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ITALI 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

ITALI 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Japanese (JAPAN)

JAPAN 1100***Japanese Civilization and Culture***

3 Credit Hours

Introduction in English to the culture, history, political institutions, mentality, literature/art and economic position of present-day Japan. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

JAPAN 1101***Elementary Japanese I***

4 Credit Hours

An introduction to modern Japanese: pronunciation, useful expressions, speech patterns, listening, reading and writing. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

JAPAN 1102***Elementary Japanese II***

4 Credit Hours

Continuation of JAPAN 1101 with emphasis on increased accuracy in listening, speaking skills, reading and writing. For students who have successfully completed JAPAN 1101 or equivalent or three years of high school Japanese. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

JAPAN 1800***Special Project***

1-4 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the catalogue for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70% (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). This course may be taken four times for credit. (1 to 4 lecture hours, 1 to 4 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

JAPAN 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course descriptions, goals, objectives, topical outline, and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

JAPAN 2201***Intermediate Japanese I***

4 Credit Hours

Continuation of JAPAN 1102 with emphasis on listening, speaking and writing of kana and kanji as well as reading of authentic materials. For students who have successfully completed JAPAN 1102 or equivalent or 4 years of high school Japanese. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

JAPAN 2202 (H1 900)***Intermediate Japanese II***

4 Credit Hours

Continuation of JAPAN 2201 with emphasis on listening, speaking and writing of kana and kanji as well as reading of authentic materials. For students who have successfully completed JAPAN 2201 or equivalent or five years of high school Japanese. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

JAPAN 2251***Conversation and Composition I***

3 Credit Hours

Develops students' listening comprehension, speaking, reading and writing skills and expands knowledge of the culture and civilization of Japanese-speaking countries. For students who have successfully completed JAPAN 2202 or equivalent. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

JAPAN 2252***Conversation and Composition II***

3 Credit Hours

Continue to develop students' listening comprehension, speaking, reading and writing skills and expands knowledge of the culture and civilization of Japanese-speaking countries. For students who have successfully completed JAPAN 2251. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

JAPAN 2800***Special Project***

1-4 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the discipline, while building upon academic knowledge and skills acquired in introductory-level classes. These courses require direct experience and focused reflection in an in-depth study of a specific topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex geographic concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). This course may be taken four times for credit. (1 to 4 lecture hours, 1 to 4 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

JAPAN 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

JAPAN 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

JAPAN 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

JAPAN 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Criminal and Justice Studies (CRIMJ)

CRIMJ 1100 (CRJ 901)***Introduction to Criminal Justice***

3 Credit Hours

Students will study the development and principles of the American criminal justice system. An emphasis will be placed on the system's primary components of courts, police, and corrections and the relationship of these entities in the administration of criminal justice in the United States. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CRIMJ 1110***Police and Society***

3 Credit Hours

Students will examine the role of police in a modern society including the functions, personnel systems, operations, management, and contemporary issues of municipal, county, state, and federal law enforcement. In addition, the historical and emerging roles of law enforcement as agents of formal social control will be discussed in addition to police and community relations. (3 lecture hours)

CRIMJ 1112***Crime Prevention***

3 Credit Hours

An overview of crime prevention strategies from an individual and community perspective, including a discussion and analysis of neighborhood watch programs, home security strategies and personal security tactics. School based and age-specific community crime prevention programs and the application of technology to crime prevention problems are discussed. (3 lecture hours)

CRIMJ 1130 (CRJ 911)***Introduction to Corrections***

3 Credit Hours

An overview of the goals, structure and operations of correctional institutions; sentencing trends and alternatives to incarceration; probation and parole; inmate life, prisonization and institutionalization; jail administration and community correctional programs. (3 lecture hours)

CRIMJ 1145***Introduction to Homeland Security***

3 Credit Hours

An overview of the evolution of the Department of Homeland Security (DHS) in the U.S. and an analysis of the major policies, practices, concepts, and challenges confronting the field. Modern threats from domestic, international, and transnational terrorism will be addressed along with issues stemming from other forms of geopolitical conflict and natural disasters. The roles of various agencies under the authority of the DHS as well as other government entities, private organizations, and individual citizens in responding to the modern threat landscape will be examined. (3 lecture hours)

CRIMJ 1146***Critical Infrastructure: Vulnerabilities Solutions***

3 Credit Hours

A comprehensive examination of the vulnerabilities and protections surrounding America's critical infrastructure. Topics including U.S. borders, transportation sectors, finance, agriculture, and cyber platforms will be analyzed. Modes of protection through government agencies, physical security measures, and critical infrastructure policy will be addressed in the context of real and potential attacks by nefarious actors. (3 lecture hours)

CRIMJ 1147***Introduction to Domestic, International, and Transnational Terrorism***

3 Credit Hours

Examination of the threats posed by domestic, international, and transnational terrorism and the complex origins, motivations, ideologies, and goals of various terrorist groups. Cultural, religious, and economic influences on terrorism will be analyzed. Topical issues will include state, political, and revolutionary terrorism, religious and apocalyptic violence, weapons of mass destruction, and terrorist tactics and targeting. International and domestic counterterrorism policies will also be considered. (3 lecture hours)

CRIMJ 1148***Emergency Management***

3 Credit Hours

Examines theories, principles, and practices of emergency management, including the related processes of mitigation, preparedness, response, and recovery. Evolution of emergency management in the U.S. and its practical application through incident command systems will be addressed. (3 lecture hours)

CRIMJ 1151***Constitutional Law***

3 Credit Hours

Students explore the development and history of the Federal Constitution emphasizing the Bill of Rights. Students will be introduced to the substantive and procedural content of the federal amendments and corresponding state provisions with emphasis on recent court interpretations and trends. (3 lecture hours)

Prerequisite: CRIMJ 1100 or equivalent or CRIMJ 1152 or equivalent or consent of instructor.

CRIMJ 1152***Criminal Law***

3 Credit Hours

Students will be introduced to the development of criminal law, its organizational components and processes, as well as its legal and public policy. Students will explore instruction on elements of a crime, substantive criminal law, criminal defenses, and accountability within the judicial process. (3 lecture hours)

CRIMJ 1153***Courts, Evidence, and Mock Trial***

3 Credit Hours

This course will examine how the American court system operates, analyze how the courts enforce the Federal rules governing the admissibility of evidence, and apply the rules of evidence in a mock court trial. (3 lecture hours)

CRIMJ 1154***Substance Abuse and the Law***

3 Credit Hours

Students will examine the most prevalent illicit and licit drugs through a historical, pharmacological, physiological assessment in order to understand their impact on the individual, their health, and society. Also reviewed are aspects of drug enforcement, adjudication, sentencing and treatment aspects as they relate to crimes involving substance abuse. (3 lecture hours)

CRIMJ 1165***Computers and Criminal Justice***

3 Credit Hours

A comprehensive overview of computer-related crimes, including related reactive and proactive investigative strategies; programs involving computer technologies developed and utilized by criminal justice investigators, analysts and other professionals. (3 lecture hours)

CRIMJ 1510***Introduction to Global Justice***

3 Credit Hours

Students will engage in study and research with regard to the criminal justice system in the United States and other countries. Students will visit jails, prisons, juvenile facilities, police agencies, and courts to go behind the scenes to learn how these agencies operate. Students will get to interview professionals and hear their perspectives about the field of criminal justice. In the second phase of the course, students will travel abroad for a comparative analysis. (3 lecture hours)

Prerequisite: Consent of instructor.

CRIMJ 1520***Introduction to Death Investigations and Taphonomy***

3 Credit Hours

Students will explore criminal investigations with an emphasis on death investigation. Students will also be introduced to the field of taphonomy as it relates to death investigations, forensic anthropology, and osteology. Course participants will be provided with an overview of identifying human remains, human decomposition, postmortem interval estimation, and human remains recovery. Students will travel to Knoxville, Tennessee for a field component. (3 lecture hours)

Prerequisite: Concurrent Enrollment in CRIMJ 2520 and consent of instructor. All students must be interviewed by the instructor and be clear of any felony convictions.

CRIMJ 1820***Selected Topics***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

CRIMJ 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

CRIMJ 2140***Introduction to Intelligence***

3 Credit Hours

Overview of the history of the intelligence industry in the United States from its founding to the present day. Concepts, processes, tradecraft, and ethical considerations associated with U.S. intelligence operations will be explored. The specific disciplines of collection, processing, analysis, and dissemination will be examined in the context of past and current geopolitical threats, international terrorism, and wider homeland security policy. (3 lecture hours)

Prerequisite: CRIMJ 1145 with a grade of C or better, or equivalent or concurrent enrollment in CRIMJ 1145, or consent of instructor.

CRIMJ 2150***Multiculturalism and Diversity***

3 Credit Hours

Students will examine current issues and social problems relating to the administration of justice in a culturally diverse society. Emphasis will be placed on the development of new strategies for criminal justice personnel to meet the challenges presented by working within a diverse society. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

CRIMJ 2231***Criminology***

3 Credit Hours

Students are introduced to theoretical explanations of crime, criminality, and society's response to antisocial and law violating behavior. Theories of crime causation are used to understand crime patterns, evaluate trends, and understand how social scientific inquiry impact research, theory, and public policy. (3 lecture hours)

CRIMJ 2240 (CRJ 914)***Juvenile Delinquency***

3 Credit Hours

Students will examine the historic context of juvenile delinquency in America. Theoretical perspectives of the causation of delinquency and criminal acts by juveniles will be studied and discussed. The overall treatment of juveniles as offenders and victims will be examined in addition to theoretical perspectives and prevention programs. (3 lecture hours)

CRIMJ 2310***Introduction to Criminal and Forensic Investigations***

3 Credit Hours

Students will study the fundamentals of criminal investigations, rules of evidence, collection and preservation of evidence, and the recording of crime scenes. Students will examine the techniques of forensic science as it relates to crime scene investigations, the proper steps in the chain of custody as it relates to evidence, and how evidence is processed at crime scenes and presented in court. (3 lecture hours)

CRIMJ 2410***Violent Crime***

3 Credit Hours

Overview of theories to explain violence, methods used in the scientific study of violence, and important research findings about correlates, patterns, processes, and trends related to criminal violence. Exploration of case studies related to violence. (3 lecture hours)

CRIMJ 2510***Global Justice Field Study***

3 Credit Hours

Students will compare and contrast British and American criminal justice systems. Participants will have an opportunity to explore British police, courts, and correctional facilities on a 12-14 day visit to the United Kingdom. In addition, students will experience British culture from a contemporary and historical perspective. (3 lecture hours)

Prerequisite: Consent of instructor and concurrent enrollment in CRIMJ 1510. All students must be interviewed by the instructor and be clear of any criminal convictions. Students must also have or be able to obtain a valid passport.

CRIMJ 2520***Death Investigations/Taphonomy Field Study***

3 Credit Hours

Students will travel to Knoxville, Tennessee for five days and participate in a field study regarding taphonomy, osteology, and forensic anthropology as they relate to the human death process. The course will be offered through the Forensic Anthropology Department at the University of Tennessee. Students will participate in classroom exercises, field work at the Anthropological Research Facility, and present their research and course work formally to class peers and University staff. (3 lecture hours)

Prerequisite: ANTHR 2400 with a grade of C or better, or equivalent and concurrent enrollment in CRIMJ 1520, and consent of instructor. All students must be interviewed by the instructor and be clear of any felony convictions.

CRIMJ 2820***Selected Topics***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: CRIMJ 1100 or consent of instructor.

CRIMJ 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

CRIMJ 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Korean (KOREA)

KOREA 1101***Elementary Korean I***

4 Credit Hours

An introduction to modern spoken Korean: pronunciation, useful expressions, speech patterns, listening, reading and writing. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

KOREA 1102***Elementary Korean II***

4 Credit Hours

Continuation of KOREA 1101 with emphasis on increased accuracy in listening, speaking skills, reading and writing. For students who have successfully completed KOREA 1101 or equivalent or three years of high school Korean. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

KOREA 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

KOREA 2201***Intermediate Korean I***

4 Credit Hours

Continuation of KOREA 1102 with emphasis on listening, speaking and writing of han-gul as well as reading of authentic materials. For students who have successfully completed KOREA 1102 or equivalent or four years of high school Korean. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

KOREA 2202 (H1 900)***Intermediate Korean II***

4 Credit Hours

Continuation of KOREA 2201 with emphasis on listening, speaking, and writing of han-gul as well as reading of authentic materials. For students who have successfully completed KOREA 2201 or equivalent or five years of high school Korean. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

KOREA 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

KOREA 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

KOREA 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

KOREA 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Library and Information Technology (LIBRA)

LIBRA 1101***Intro to Libraries & the Information Age***

3 Credit Hours

Introduction to different types of libraries and the information industry. The role of the Library Technical Assistant (LTA) in all areas of the library profession is explored. An overview of basic library and information research methods and tools, both print and digital format is presented. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

LIBRA 1102***Introduction to Reference and Information Services***

3 Credit Hours

Introduction to reference and information services for the Library Technical Assistant. Includes basic tools needed to answer directional and ready reference questions. Print and electronic resources, interview techniques, and virtual reference services are discussed. (3 lecture hours)

Prerequisite: LIBRA 1101 with a grade of C or better or consent of instructor.

LIBRA 1103***Acquisition of Library Materials***

3 Credit Hours

Introduces the Library Technical Assistant to the process of how to acquire materials from the decision to obtain them to the time they are ready to be cataloged. Automation processes and techniques are incorporated. (3 lecture hours)

Prerequisite: LIBRA 1101 with a grade of C or better or consent of instructor.

LIBRA 1104***Essential Library Workplace Skills***

3 Credit Hours

Overview of the skills necessary to communicate effectively with coworkers and the public, work in team settings, deal with a variety of personality types, resolve conflicts, and become an effective part of the library workforce. (3 lecture hours)

LIBRA 1105***Readers Advisory***

3 Credit Hours

Introduces genres of literature and techniques for patron interaction. Topics include library collection analysis, display creation, bibliographic tool development and reading programs. (3 lecture hours)

Prerequisite: LIBRA 1101 or equivalent or consent of instructor.

LIBRA 1820***Selected Topics***

3 Credit Hours

Addresses current issues in the field that necessitate a greater depth, broader scope or fuller assimilation of a particular area of study. (3 lecture hours)

Prerequisite: LIBRA 1101 or equivalent, or consent of instructor or program coordinator.

LIBRA 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This class may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

LIBRA 2100***Introduction to Cataloging and Classification***

4 Credit Hours

The role of Library Technical Assistant (LTA) in descriptive and subject cataloging and processing of print and non-print materials. Emphasis is on the organization of information resources in print and non-print formats. Includes the philosophy, tools and techniques for performing cataloging. (4 lecture hours)

Prerequisite: LIBRA 1101 with a grade of C or better or consent of instructor.

LIBRA 2200***Serving the Public in Today's Libraries***

4 Credit Hours

Role of the Library Technical Assistant (LTA) in serving the public including programming, creating displays, basic circulation desk duties, shelf maintenance, interlibrary loan activities, registering and effective interaction with patrons. Automated and online systems are emphasized. (4 lecture hours)

Prerequisite: LIBRA 1101 with a grade of C or better or consent of instructor.

LIBRA 2400***Library Technology***

3 Credit Hours

Introduction to technology applications for library functions and services. (3 lecture hours)

Prerequisite: LIBRA 1101 or equivalent, or consent of instructor.

LIBRA 2500***Service to Children and Young Adults***

3 Credit Hours

The course will cover library services appropriate for children and youth. Topics will include child and adolescent development, programming, collection development, dedicated space, youth participation, the use of technology, and other aspects of services and materials for children. Attention is paid to methods for connecting children to materials and services available in modern libraries. (3 lecture hours)

Prerequisite: LIBRA 1101 with a grade of C or better, or consent of instructor.

LIBRA 2600***Library Practicum***

4 Credit Hours

Capstone course integrating the application of all course work in the Library Technology Program. Provides a forum for discussing issues related to working in the library field, guidance in searching for jobs, and instruction about how to create a professional portfolio. Requires 75 hours of hands-on experience in a library performing duties appropriate for a Library Technical Assistant. (2 lecture hours, 4 lab hours)

Prerequisite: LIBRA 1102, LIBRA 1103, LIBRA 1104, LIBRA 2100, LIBRA 2200, and LIBRA 2400, all with a grade of C or better; LIBRA 1105 or LIBRA 2500 with a grade of C or better; and consent of instructor.

LIBRA 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

LIBRA 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Long-Term Care Administration (LTC)

LTC 1130***Introduction to Long-Term Care Services***

3 Credit Hours

Students will be introduced to the organization and management of long-term care services. Other areas include the impact of state and federal regulations as well as issues around the funding services. Students will also examine the health services needed for current and future populations in long-term care. (3 lecture hours)

Prerequisite: ENGLI 1101 with a grade of C or better or equivalent. Program admission is required.

LTC 1140***Introduction to Nursing Home Administration***

3 Credit Hours

Students will be introduced to the responsibilities of the nursing facility administrator, licensure procedures, and standards. Relevant legal, funding, and program issues will also be addressed. (3 lecture hours)

Prerequisite: LTC 1130 with a grade of C or better.

LTC 1160***Social Gerontology and Long-Term Care***

3 Credit Hours

Students will be introduced to the physical, psychological, sociological, and financial aspects of aging. Other topics will include long-term care options and current social policies. (3 lecture hours)

Prerequisite: ENGLI 1101 with a grade of C or better or equivalent. Program admission is required.

Magnetic Resonance Imaging Technology (MRIT)

MRIT 2101***Physical Principles and Instrumentation***

3 Credit Hours

Comprehensive overview of MR imaging principles as well as the instrumentation associated with MR imaging. Provides a basic understanding of the principles and system components of MR image acquisition. This information enables the student to maximize MR image quality by understanding the fundamentals and system components of MR imaging. (3 lecture hours)

Prerequisite: Admission to the program is required.

MRIT 2102***Sectional Anatomy***

3 Credit Hours

A study of normal anatomy and normal variations, as well as its appearance in multiple planes, enables the student to better recognize abnormal conditions and make the associated imaging changes required to adequately demonstrate the patient's anatomy and pathology. (3 lecture hours)

Prerequisite: Admission to the program is required.

MRIT 2103***Principles and Procedures I***

3 Credit Hours

The content covers specific clinical applications, coils that are available and their use, considerations in the scan sequences, specific choices in the protocols and positioning criteria. Anatomical structures and the plane that best demonstrates anatomy are discussed, as well as signal characteristics of normal and abnormal structures. (3 lecture hours)

Prerequisite: Admission to the program is required.

MRIT 2104***Clinical Practice I***

3 Credit Hours

Content is presented as a progression in competency levels through clinical performance objectives and competency exams. (24 clinical hours)

Prerequisite: Admission to the program is required.

MRIT 2105***MR Pathology***

3 Credit Hours

The magnetic resonance imaging pathology course familiarizes the student with the common pathologies found in magnetic resonance imaging and the appearance of these pathologies in various imaging protocols. (3 lecture hours)

Prerequisite: Admission to Magnetic Resonance Imaging Technology program and completion of MRIT 2101, MRIT 2102, and MRIT 2103 with a grade of C or better; or consent of instructor.

MRIT 2106***Imaging Applications***

3 Credit Hours

Imaging applications provide the student with a comprehensive overview of Magnetic Resonance Imaging (MRI) pulse sequences, image formation, and image contrast, as well as the knowledge of the parameters and imaging options used to create MRI images. (3 lecture hours)

Prerequisite: Admission to Magnetic Resonance Imaging Technology program and completion of MRIT 2101, MRIT 2102, and MRIT 2103 with a grade of C or better; or consent of instructor.

MRIT 2107***Principles and Procedures II***

3 Credit Hours

The second principles and procedures course provides the student with the continuation of the imaging techniques related to the central nervous system (CNS), neck, thorax, musculoskeletal system and abdominopelvic regions. (3 lecture hours)

Prerequisite: Admission to Magnetic Resonance Imaging Technology program and completion of MRIT 2101, MRIT 2102, and MRIT 2103 with a grade of C or better; or consent of instructor.

MRIT 2108***Clinical Practice II***

3 Credit Hours

Content is presented as a progression in competency levels through clinical performance objectives and competency exams. (24 clinical hours)

Prerequisite: MRIT 2104 or equivalent or consent of instructor.

MRIT 2109***Clinical Practice III***

3 Credit Hours

Content is presented as a continuation in competency levels through clinical performance objectives and competency exams. (15 clinical hours)

Prerequisite: MRIT 2108 or equivalent or consent of instructor.

Management (MANAG)

MANAG 1100***Supervision***

3 Credit Hours

An introduction to the principles of frontline supervision. Explores hands-on leadership, communication, motivation, and problem-solving. Emphasis on training, ethical, legal responsibilities, and overseeing a diverse workforce. (3 lecture hours)

MANAG 1820***Selected Topics***

1-3 Credit Hours

Introductory exploration, discussion, review, and analysis of selected topics in management with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Specific pre-enrollment criteria may change depending on the topic focus of the course.

MANAG 1840***Independent Study***

1-3 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required.

MANAG 2170***Project Management***

3 Credit Hours

Overview of project management tools and methodology. Includes the strategic significance of projects, project selection, team building and decision-making, and project planning, scheduling, budgeting and resource allocation. Project implementation, control and termination are also included. Provides a foundation for those involved in using project management to decrease cycle times in e-commerce and traditional business operations. (3 lecture hours)

MANAG 2210***Principles of Management***

3 Credit Hours

The study of the essential principles and concepts of management. Includes theoretical bases and practical applications of planning, organizing, leading, and controlling. Integrates the managerial functions, history, strategies, and decision making within the managerial process. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100.

MANAG 2215***Leadership***

3 Credit Hours

Explore principles and concepts in leadership. Includes leadership styles, emotional intelligence, power, diversity, strategy, and change. Integrates theoretical and practical applications in business and organizational leadership. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100.

MANAG 2220***Organizational Behavior***

3 Credit Hours

The study of individual human behavior and group dynamics in organizations. Organizational Behavior looks at employee behavior, decisions, perceptions, and emotional responses. Organizational Behavior also encompasses the study of how organizations relate to each other and to their counterparts in other organizations. (3 lecture hours)

Course types: Human Relations (A.A., A.S., A.A.S., A.G.S.)

MANAG 2230***Purchasing***

3 Credit Hours

Introduction to the principles of purchasing within the context of supply chain management. Explore the purchasing process, supplier relationships, negotiation strategies, cost management, and the role of technology. Emphasis is placed on ethical practices, global sourcing, and effective decision-making to optimize organizational procurement processes. (3 lecture hours)

Prerequisite: BUSIN 1100 or consent of instructor.

MANAG 2240***Human Resources Management***

3 Credit Hours

Addresses key human resources management (HRM) competencies and practices associated with attracting, developing, and retaining an organization's human resources. Includes HRM practices, processes, and policies associated with strategically aligning the firm's human talent to organizational goal attainment. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100 and MANAG 2210 or equivalent.

MANAG 2242***Talent Acquisition and Retention***

2 Credit Hours

Course provides advance study in the acquisition and retention of an organization's human talent. The course explores Human Resources' role in developing, implementing, and measuring individual and organizational success in the following areas: workforce planning, sourcing, recruiting, hiring, onboarding, orientation, and retention. (2 lecture hours)

Prerequisite: MANAG 2240 with a grade of C or better, or equivalent or consent of instructor.

MANAG 2245***Compensation, Benefits, and Total Rewards***

2 Credit Hours

Course will provide advanced study of Human Resources concepts and processes to enhance organizational and employee talent development, acquisition, retention, and motivation. Topics include total rewards philosophies, compensation, benefits, pay structures, and job evaluation. (2 lecture hours)

Prerequisite: MANAG 2240 with a grade of C or better, or equivalent or consent of instructor.

MANAG 2248***Strategic Human Resources Management***

2 Credit Hours

Course provides advanced study related to the value organizations gain from alignment of strategic Human Resources Management (HRM) with the organization's overall strategic management plan. Human Resources (HR) position as a strategic partner with management is examined, as is its role in workforce planning, diversity, equity, and inclusion, employee mental health, organizational culture, risk management, corporate social responsibility, sustainability, and measuring employee effectiveness on organizational goal achievement. (2 lecture hours)

Prerequisite: MANAG 2240 with a grade of C or better, or equivalent or consent of instructor.

MANAG 2295***Strategic Management***

3 Credit Hours

Capstone course focusing on the strategic management process. Topics include the analysis, formulation, and execution of an organization's corporate, business, and functional strategic plans and competitive positioning. Research of an organization's application of the strategic management process provides students with the opportunity to integrate and assess the use of business, management, and marketing concepts. (3 lecture hours)

Prerequisite: BUSIN 1100, MANAG 2210, and MARKE 2210, all with a grade of C or better, or equivalent, or consent of instructor.

MANAG 2860***Internship for Management***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of Instructor 2.0 cumulative grade point average; MANAG 2210 and 6 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MANAG 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Manufacturing Technology (MANUF)

MANUF 0480***Blueprint Reading for Machinists***

1 Credit Hour

Lines, dimensions, tolerances, notes, symbols, specifications, materials, manufacturing processes and standards. Orthographic and pictorial projections. Machine shop terminology. (1 lecture hour)

MANUF 1101***Industrial Design/CAD***

3 Credit Hours

An introduction to the use of microcomputers for design of industrial blueprints of intermediate complexity. Sketching, lettering, orthographic projections, descriptive geometry, point, line and basic geometric shapes. The use of menus, layers, fonts and weights. Basic dimensioning, tolerancing and pictorial drawings. The student is expected to draw a blueprint with simple dimensions label and notes using different layers. (2 lecture hours, 2 lab hours)

MANUF 1102***Basic Robotics Fabrication***

2 Credit Hours

Students will design a robot using a 3D modeling program and construct their design into a functional robot. (4 lab hours)

Prerequisite: Consent of Instructor.

MANUF 1104***Technical Mechanics***

2 Credit Hours

Analysis and solution of practical problems in technical mechanics. Application of basic calculations and standards for design and maintenance of mechanical systems. (2 lecture hours)

MANUF 1110***Metrology***

3 Credit Hours

Initial course in the science of precision measurement techniques. Basic and advanced methodology behind measurement principles and tools used in the measurement process. Emphasis on laboratory skills in dimensional measurement using micrometers, calipers and gage blocks. Basics of geometric tolerancing and data analysis. Various applications of measurement including the Coordinate Measuring Machine (CMM), roundness measurement, and surface finish measurement. Additional topics include optical systems and quality control methods, as well as calibration standards. (2 lecture hours, 2 lab hours)

MANUF 1121***Physical Metallurgy***

3 Credit Hours

Functions of the metallurgical laboratory and equipment including mechanical testing, metallography, heat treatment and extractive metallurgy. Basic principles concerning materials science including atomic and crystal arrangements and their effect on mechanical properties. Simple phase equilibrium. Ferrous and nonferrous metals and alloys classification systems. (2 lecture hours, 2 lab hours)

MANUF 1126***Introduction to Plastics***

3 Credit Hours

The theory and use of plastics in industry. Physical, chemical and electrical properties of plastics and testing criteria are discussed. Processes such as injection molding, extrusion, blow molding, rotational molding, and thermoforming are covered. Control factors affecting the quality of parts, applications, benefits and limitations of plastics are explained. Related topics include process relationships, parameter setting techniques, rapid changeover techniques, process control and troubleshooting. (3 lecture hours)

MANUF 1127***Engineering Materials of Industry***

3 Credit Hours

Basic principles of materials technology including the internal structures of materials, physical and mechanical properties, fusion and bonding, annealing and plastic deformation. (3 lecture hours)

MANUF 1151***Machine Shop I***

3 Credit Hours

Designed for students with little background in the use of metal-working machine tools. Basic principles and operations on the engine lathe, vertical milling machine and surface grinder. Precision measurement. (2 lecture hours, 2 lab hours)

MANUF 1153***Advanced Machine Processes***

3 Credit Hours

The application of skills that are commonly known in the industry as machine shop. The development of operation skills of traditional engine lathes, vertical/horizontal mills and grinding as well as operations on similar machines. Emphasis is on those skills needed by trade's persons who have achieved proficiency in the operation of machines and related tooling and equipment. Quality skills related to machining and some planning and job control skills related to machine work. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 1151 or equivalent or consent of instructor.

MANUF 1160***Technical Static & Strength of Material***

4 Credit Hours

Basic analysis of external force systems acting upon bodies in equilibrium with subsequent treatment of the stresses and strains induced. Laboratory projects involve the use of nondestructive and destructive testing equipment to determine the various mechanical properties of materials and their behavior under load. Not intended for engineering students. (3 lecture hours, 2 lab hours)

Prerequisite: PHYSI 1201 or equivalent and MATH 1432 (or college equivalent) or qualifying score on the Mathematics placement test or qualifying A.C.T. math score or consent of instructor.

MANUF 1180***Quality Control***

3 Credit Hours

An introduction to quality control and the development of the concept of total quality control engineering, process improvement, and quality information systems. A broad overview of total quality control and its scope throughout the business organization enables the student to analyze the various costs of quality and improve productivity. Topics will include 100 percent inspection versus statistical inspection and process control charts, as well as some of the tools of Organizational Development (OD) useful in promoting a Total Quality Control (TQC) and Total Quality Management (TQM) environment. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MANUF 1700***Fundamentals of Plastics and Plastic Products***

3 Credit Hours

Fundamentals of plastics materials as they pertain to plastic products. Topics include comparing and contrasting elastomers and plastics, and testing methods. Data sheet analysis used to predict product characteristics. (3 lecture hours)

Prerequisite: MANUF 1126 with a grade of D or better or equivalent.

MANUF 1820***Selected Topics I***

1-10 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 6 lecture hours, 2 to 8 lab hours)

MANUF 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

MANUF 2200***Production Technology***

4 Credit Hours

The theory of process planning and process control in manufacturing. Emphasis is on the study of these concepts as they apply the manufacturing production process, safety, quality and continuous improvement, and maintenance awareness. (4 lecture hours)

Prerequisite: Consent of instructor is required.

MANUF 2201***Geometric Dimensioning and Tolerancing***

3 Credit Hours

Introduces the principles of industrial drafting as specified by the American National Standards Institute (ANSI). Topics include part dimensional control techniques, interchangeability of parts and the differences between traditional dimensioning and geometric dimensioning. Symbols and terms for dimensioning, datum and materials condition symbols are introduced. Various tolerances of form, profile orientation, run-out and location are demonstrated. Feature control frames are discussed. (3 lecture hours)

Prerequisite: MANUF 1101 or consent of instructor.

MANUF 2202***Solid Modeling and Design***

3 Credit Hours

The theory and application of solid modeling techniques for product design and manufacturing. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 1101 or consent of instructor.

MANUF 2203***Manufacturing Processes and Design***

3 Credit Hours

A survey of manufacturing methods and materials employed in cold working processes. The student will understand the various methods of product fabrication and the manufacturing processes for sound economic decision making in manufacturing and product design. Other topics include the interrelationship among materials, their selection for use in product design and processes, and conversion of these materials into finished components. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 2202 or consent of instructor.

MANUF 2206***Mechanical Computr-Aided Drafting/Design***

3 Credit Hours

Computer-aided drafting/design (CADD) as drafting tool for the creation of mechanical production drawings. Solids modeling concepts and application of geometric dimensioning techniques are explained. The student is expected to finish detail and assembly drawings from a layout and demonstrate an understanding of the principles of engineering and design. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 2201 or equivalent and MANUF 2202 or equivalent and consent of instructor.

MANUF 2207***Tool Design***

3 Credit Hours

An advanced course on the designing of manufacturing production tools, molds, dies, jigs and fixtures. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 2202 or equivalent or consent of instructor.

MANUF 2208***Mechanical Design Portfolio***

3 Credit Hours

Practical overview of the design process with case materials and real-life design problems. Provides the student with an opportunity to create a design portfolio. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 2207 or equivalent, or consent of instructor.

MANUF 2240***Basic Parametric Design-Pro/E***

3 Credit Hours

A basic course in creating 3-dimensional. (3-D) parametric parts, 2-dimensional (2-D) drawings and 3-D assemblies. Includes multi-part models. Emphasis is on the philosophy of parametric design and constraints. (2 lecture hours, 2 lab hours)

Prerequisite: Experience in design and drafting.

MANUF 2242***Advanced Parametric Design-Pro/E***

3 Credit Hours

Advanced course in creating multi-part parametric assemblies, exploded assemblies, parts having complex surface features, and design of sheet metal parts in both a flattened and bent state using parametric modeling software. Includes associated drawing files. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 2240 with a grade of D or better, or equivalent, or consent of instructor.

MANUF 2251***Computer Numerical Control (CNC)***

3 Credit Hours

An introduction to CNC machinery as it applies to the operator and programmer. Introduction to CNC programming coding, set-up, tooling, operation and troubleshooting. Basic principles and applications of numerically controlled equipment and the set-up and operation of CNC machines. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 1151 or equivalent, or consent of instructor.

MANUF 2252***CNC Operations***

3 Credit Hours

Theory and practice in the preparation and machining of selected parts. Skill is developed in fixturing, tool offsets, finding and setting program zeros. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 1151 and MANUF 2251, both with a grade of B or better, or equivalent or consent of instructor.

MANUF 2253***Computer-Aided Manufacturing (CAM)***

3 Credit Hours

Introduction to computer assisted part of programming (CAM) as it applies to computer numerical control (CNC). Various types of programming systems. Piece part geometry definition, computer input of this geometry, and post processing this information into CNC code. This code is then used to machine parts. Familiarity with CAM software and mathematical skills required. The student is expected to demonstrate a measurable level of skill in geometry definition of the CAM system, post processor knowledge to modify CNC code, and application of computer aided design (CAD) to generate CNC code. (2 lecture hours, 2 lab hours)

Prerequisite: MANUF 2251 or equivalent.

MANUF 2261***Basic Die Making I***

4 Credit Hours

Fundamental theory and study of tool and die making, including punch press sizes and feeds for dies, and their uses and relationships to each other. (4 lecture hours)

Prerequisite: Consent of instructor is required.

MANUF 2262***Basic Die Making II***

4 Credit Hours

Continuation of Basic Die Making I. Principles and processes used in sheet metal work, using stock-strip layouts, cutting and stripping pressures, and flat blank layouts. (4 lecture hours)

Prerequisite: MANUF 2261 or equivalent or consent of instructor.

MANUF 2265***Mold Making I***

4 Credit Hours

Mold construction, elastics, die casting, proper selection and heat treatment. (4 lecture hours)

Prerequisite: Consent of instructor is required.

MANUF 2267***Mold Making II***

4 Credit Hours

An advanced class in mold making. Emphasis is on the use of side cores, various methods of mold construction, fitting clearances, locking devices, and finishes required in mold cavities. (4 lecture hours)

Prerequisite: MANUF 2265 or equivalent, or consent of instructor.

MANUF 2271***Robotic Application***

3 Credit Hours

Industrial applications of robots with emphasis on set-up, programming and operations. End effect or design and production line interfacing are studied. (2 lecture hours, 2 lab hours)

Prerequisite: ELMEC 1171 or equivalent.

MANUF 2272***Advanced Die Making and Engineering I***

4 Credit Hours

An introduction to draw dies: the theory of the drawing of metal, metal reaction, problems and solutions used, lubricants and draw die reductions along with advanced work in gages, fixtures and intricate progressive dies. (4 lecture hours)

Prerequisite: MANUF 2262 or equivalent, or consent of instructor.

MANUF 2274***Advanced Die Making and Engineering II***

4 Credit Hours

An advanced study of draw dies including types, materials used, lubricants, and the theory of draw die reductions with a continuation of advanced work in gages, fixtures and intricate progressive dies. (4 lecture hours)

Prerequisite: MANUF 2272 or equivalent, and consent of instructor.

MANUF 2276***Advanced Mold Making and Engineering I***

4 Credit Hours

Theory and process of mold cavities using electrical impulse methods, thread molding and automatic unscrewing methods. (4 lecture hours)

Prerequisite: MANUF 2267 or equivalent, or consent of instructor.

MANUF 2277***Advanced Mold Making and Engineering II***

4 Credit Hours

A continuation of Advanced Mold Making and Engineering I. Product standards for die casting and analysis of mold cavities by electrical impulse methods. Thread molding and automatic unscrewing methods, current advances in molds, molding machines, and mold-making methods. (4 lecture hours)

Prerequisite: MANUF 2276 or equivalent, and consent of instructor.

MANUF 2280***Industrial Safety***

2 Credit Hours

Survey and analysis of current problems and trends in the design and supervision of industrial accident prevention programs. (2 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MANUF 2281***Cost Analysis***

2 Credit Hours

Study of the economic interdependency of the design, tooling, manufacturing, inspection and testing decisions and the means of quantifying such decisions. Sources and controls of direct, indirect and fixed costs. Influences of cost-accounting practices on engineering decisions. Generating alternatives based on the principles of time and motion economics and work simplification. Cost estimation procedures and controls. (2 lecture hours)

MANUF 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MANUF 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Marketing (MARKE)

MARKE 1100***Consumer Marketing***

3 Credit Hours

Introduction to consumer marketing principles. Concepts, functions, and activities involved in generating consumer satisfaction are covered. (3 lecture hours)

MARKE 1150***Social Media Marketing***

3 Credit Hours

An overview of social media marketing tools, platforms, and strategies used to boost awareness, expand customer base, and promote a business. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100.

MARKE 1171***Database Marketing***

3 Credit Hours

Strategy, methods and techniques used to design, generate, compile, analyze and strategically use marketing databases. (3 lecture hours)

MARKE 1175***Customer Relationship Management***

3 Credit Hours

Strategy and methods used to increase customer satisfaction and to improve and maintain customer relationships. (3 lecture hours)

MARKE 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

MARKE 1840***Independent Study***

1-3 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required.

MARKE 2210***Principles of Marketing***

3 Credit Hours

Study of satisfying customer needs for goods and services. Marketing environments, marketing planning, and marketing research are covered. Target market identification, competitor analysis and marketing strategy are modeled. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100.

MARKE 2215***Domestic Distribution Channels***

3 Credit Hours

Creation and maintenance of a domestic logistics system to move products from producers to consumers. Role of distribution in the marketing effort and in meeting the needs of customers. Distribution channel design, management, motivation, evaluation, price determination and conflict resolution. Domestic logistics and distribution for Internet and direct marketing. (3 lecture hours)

Prerequisite: BUSIN 1100 and MARKE 2210 or equivalent.

MARKE 2220***Principles of Selling***

3 Credit Hours

Overview of the selling process in the business-to-business marketing environment. Explores selling competencies, needs assessment, adaptive communication, ethics, technology, and management of the selling process. Applies selling principles to the job search process. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100.

MARKE 2225***Consumer Behavior***

3 Credit Hours

Study of consumer need for goods and services. Surveys the impact of both internal and external forces on consumer decision making. Motivation, personality, attitudes, groups, social media, culture and other types of influences will be considered. Marketer's strategic responses to these influences will also be explored. (3 lecture hours)

Prerequisite: MARKE 2210 or equivalent or consent of instructor.

MARKE 2230***Principles of Retail***

3 Credit Hours

Explores principles and growth strategies of retail. Includes market information, organization, layout, location, merchandising, buying, receiving, display, promotion, price, control systems, human resources, and government regulations. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100.

MARKE 2235***Introduction to Digital Marketing Analytics***

3 Credit Hours

Learn the digital marketing reporting tools to collect, measure and analyze data trends and patterns to make optimal business recommendations. Course prepares students to complete related industry certifications. (3 lecture hours)

Prerequisite: Recommended: MARKE 2270 or MARKE 1150 or equivalent

MARKE 2240 (MC 912)***Advertising***

3 Credit Hours

Explores the role of advertising as it relates to an organization's integrated communication plan. Topics include copywrite, design, media selection, buyer behavior, and government regulation on advertising. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100 and MARKE 2210.

MARKE 2250***Business to Business***

3 Credit Hours

Application of marketing principles to the business/industrial/organizational market. Covers demand, marketing intelligence, and the development of strategy for products and services, supply chain management, pricing, promotion, control, customer relationship management, communication, and electronic marketing methods. (3 lecture hours)

Prerequisite: Recommended: BUSIN 1100 and MARKE 2210.

MARKE 2255***International Logistics***

3 Credit Hours

Planning, implementing and controlling an international system to move products from point of origin to consumers located in a different country. Covers the primary elements of international logistics including legal considerations, transportation modes and packaging for export. (3 lecture hours)

MARKE 2270***Digital Marketing***

3 Credit Hours

Explore world of digital marketing through email, mobile, video, search engine, and social media. Integrate digital tools into marketing campaigns to build brand equity, create awareness, and motivate desired consumer behaviors. (3 lecture hours)

Prerequisite: Recommended: MARKE 2210.

MARKE 2860***Internship for Marketing***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor, Marketing 2210, 2.0 cumulative grade point average; six semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Associate Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MARKE 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Mass Communication (MCOMM)

MCOMM 1100 (MC 911)***Introduction to Mass Communication***

3 Credit Hours

Overview of the mass media as a functionally-integrated system that emphasizes critical thinking about historical development, nature, functions, and storytelling responsibilities in a global environment. Mass media roles in American society and the effect on consumers through social and traditional media are included. For non-majors and majors. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MCOMM 1105 (MC 919)***News Reporting & Writing for Multimedia***

3 Credit Hours

Develops basic journalistic reporting skills and storytelling techniques in a multimedia environment for citizen journalism and professional news gathering. Emphasizes live reporting to produce news stories, podcasts, video assignments and social media. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MCOMM 1120 (MC 914)***Introduction to Broadcasting in a Global Environment***

3 Credit Hours

Introduces students to the history of broadcasting and the concept of how globalization has impacted the broadcasting industry today. Students develop projects on U.S. broadcast programming, important media figures, FCC regulations, and non-U.S. media. (3 lecture hours)

Course types: Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

MCOMM 1126***Fake News and the Search for Truth in Today's Media***

3 Credit Hours

This course will provide opportunities to discuss and analyze the history of fake news, news production, consumption and evaluation. Students will develop the critical thinking skills necessary to be an informed citizen; understand how their worldview affects their interpretation of the news; and create a personal strategy for fact-checking and evaluating the news. Students will identify types of fake news to determine the credibility of news content. (3 lecture hours)

MCOMM 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for journalism and mass communication. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses hold an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, and other appropriate requirements). (1 to 3 lecture hours)

MCOMM 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

MCOMM 2100***Social Media As News***

3 Credit Hours

Uses Facebook, Twitter, YouTube, Linked-in, listservs, blogs and other interactive online media to develop students as citizen journalists. Students will publish writing, video and audio for social commentary and news values on current events and seek audience interaction. (3 lecture hours)

MCOMM 2255***Lies, Manipulation, and Misinformation in Mass Communication***

3 Credit Hours

Discussion and analysis of the history of fake news, news production, consumption and evaluation. Students will have the opportunity to develop the critical thinking skills necessary to be an informed citizen, understand how their worldview affects their interpretation of the news, and create a personal strategy for fact-checking and evaluating the news. (3 lecture hours)

MCOMM 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MCOMM 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Mathematics (MATH)

MATH 0459***Whole Number Arithmetic***

1 Credit Hour

Content includes principles of arithmetic: fundamental operations with whole numbers, common fractions, decimals, exponents, roots, and order of operations. (2 lab hours)

Prerequisite: A qualifying score on the mathematics placement test.

MATH 0460***College Arithmetic***

3 Credit Hours

Principles of arithmetic. Fundamental operations with whole numbers, common fractions and decimals. Percents and applications in the world of business. Rational numbers, exponents and powers. This course may be taken four times for credit. (3 lecture hours)

MATH 0461***Pre-Algebra***

3 Credit Hours

Content includes principles of arithmetic: fundamental operations with whole numbers, common fractions, decimals, percents and applications in the world of business, rational numbers, exponents, and powers. (3 lecture hours)

Prerequisite: MATH 0459 with a C or better, or equivalent, or qualifying score on placement exam.

MATH 0465***Preparatory Mathematics for General Education***

5 Credit Hours

Students develop the foundational mathematical skills necessary for general education mathematics courses (Math 1218 and Math 1220). Content features collaborative project-based and technology-enabled group work including modeling, problem solving, critical thinking, data analysis, algebra fundamentals, and both verbal and written communication of mathematical ideas. (5 lecture hours)

Prerequisite: MATH 0461 or MATH 0481 with a grade of C or better, or equivalent or a qualifying score on the math placement exam.

MATH 0470***Elementary Plane Geometry***

3 Credit Hours

Points and lines in the plane, angles, triangles, quadrilaterals, polygonal regions, circles and their relationships. (3 lecture hours)

Prerequisite: MATH 0481 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

MATH 0481***Foundations for College Mathematics I***

5 Credit Hours

Topics from elementary algebra: sets of numbers, operations with real numbers, variables, integral exponents, scientific notation, simplification of algebraic expressions, solving linear equations and inequalities in one variable, graphing linear equations, writing equations of lines, solving linear inequalities in two variables, solving systems of linear equations in two or more variables, applications, problem solving, operations with polynomials, factoring polynomials, and solving equations using factoring. (5 lecture hours)

Prerequisite: MATH 0460 or MATH 0461 with a grade of C or better, or equivalent or a qualifying score on the mathematics placement test.

MATH 0482***Foundations for College Mathematics II***

5 Credit Hours

Students will survey topics from elementary algebra and intermediate algebra. Topics include: operations with algebraic fractions, solving equations with the algebraic fractions, radicals and rational exponents, complex numbers, solving quadratic equations, variation, solving equations and inequalities involving absolute value, function notation, graphing functions, inverse functions, exponential and logarithmic functions, applications, and problem solving. (5 lecture hours)

Prerequisite: Demonstrated geometry competency (level 2) and MATH 0481 (or college equivalent) with a grade of C or better or a qualifying score on the mathematics placement test.

MATH 0485***Algebra Refresher Workshop***

0.5 Credit Hours

Designed as a focused review of the elementary and intermediate algebra techniques and associated problem solving skills required for a student to be successful in college level math. Students meeting mastery-level performance qualifications in the workshop can take a written departmental exit examination for potential placement. (0.5 lecture hour)

Prerequisite: Consent of instructor is required.

MATH 1100***Business Mathematics***

3 Credit Hours

Students will be introduced to the application of mathematics to business transactions, analysis and solution of the business problems in profit and loss, interest, installment transactions, percent discounts, taxes, and payroll. (3 lecture hours)

Prerequisite: MATH 0460 or MATH 0461 with a grade of C or better, or equivalent or a qualifying score on the mathematics placement test.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Mathematics (A.A.S., A.G.S.)

MATH 1102***Mathematics for Health Sciences***

3 Credit Hours

Designed for health science majors. Topics include systems of measurements, use of formulas, dimensional analysis, percents, decimals, fractions, ratio and proportion, direct and inverse variation, solutions, and dosage calculations. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0481 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1104***Mathematics for Horticulture***

3 Credit Hours

Designed for horticulture majors only. Topics include fractions, decimals, percents, systems of measurement, dimensional analysis, use of formulas, ratio and proportion, linear equations, perimeter, area, volume, and surface area as related to landscape, mixtures as related to seed, fertilizer and chemicals, estimation, scale drawings, sales including discount and markup, construction as related to landscape, and estimates and bids on landscaping projects. (3 lecture hours)

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1108***Perspectives of Mathematics***

3 Credit Hours

The course surveys some of the major ideas of mathematics and relationships to the arts, life sciences, physical sciences, social sciences, games, etc. Topics are selected from number systems, inductive and deductive reasoning, algebraic processes and methods, geometry, probability and statistics. (3 lecture hours)

Prerequisite: Demonstrated geometry competency (level 2), and MATH 0481 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1115**Technical Mathematics I**

3 Credit Hours

For technical/occupational programs. Emphasizes problem-solving skills using elementary algebra, right angle trigonometry, and ratio and proportion. (3 lecture hours)

Prerequisite: MATH 0481 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1116**Technical Mathematics II**

5 Credit Hours

A continuation of Technical Mathematics I emphasizing problem solving skills using trigonometry, common logarithms and natural logarithms. (5 lecture hours)

Prerequisite: MATH 1115 with a grade of C or better.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1120**Mathematical Foundations for Diagnostic Medical Imaging Sonographers**

3 Credit Hours

Students will be introduced to mathematical applications and problem solving in the field of sonography. Topics include systems of measurement, dimensional analysis, application of formulas, probability, and statistics. Curriculum is designed for ultrasound program applicants. (3 lecture hours)

Prerequisite: MATH 0482 (or college equivalent) with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1218 (M1 904)**General Education Mathematics**

3 Credit Hours

Students will learn mathematical reasoning and the solving of real-life problems, rather than routine skills. Four topics will be studied: set theory, logic theory, counting techniques and probability, and mathematics of finance. The course is designed to fulfill general education requirements, and not designed as a prerequisite for any other college mathematics course. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0482 with a grade of C or better, or equivalent, or a qualifying score on the mathematics placement test, or a qualifying ACT math sub-score, or a qualifying SAT math sub-score, or a qualifying score on the AP Precalculus exam, or a qualifying transitional math code, or a qualifying high school GPA with successful completion of a 4th year high school math class.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1220 (M1 901)**Quantitative Literacy**

3 Credit Hours

Students will learn basic numeracy needed by a college graduate to reason about quantities, their magnitudes, and their relationships between and among other quantities. Topics include linear systems, linear programming, analysis and interpretation of graphs, logic and reasoning, descriptive statistics, the normal distribution, statistical inference, estimation, and approximation. This course is designed to fulfill general education requirements, and not designed as a prerequisite for any other college mathematics course. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0482 with a grade of C or better, or equivalent, or a qualifying score on the mathematics placement test, or a qualifying ACT math sub-score, or a qualifying SAT math sub-score, or a qualifying score on the AP Precalculus exam, or a qualifying transitional math code, or a qualifying high school GPA with successful completion of a 4th year high school math class.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Mathematics (A.A.S., A.G.S.)

MATH 1321**Mathematics for Elementary School Teachers I**

4 Credit Hours

Students interested in a career working with children from birth to grade 8 would benefit from taking this course. It is the first course of a two-part sequence. Students will explore sets, logic and mathematical reasoning, problem solving, numeration systems, and elementary number theory. Other topics will include properties, algorithms, and computation with the sets of whole numbers, integers, rational numbers, and real numbers. Active participation in problem solving, conceptual understanding, and mathematical reasoning are integral foundations of this course. Students are expected to already have mastery level arithmetic skills and be proficient at arithmetic operations. This class is intended to teach pre-service teachers multiple strategies for presenting elementary mathematical content. An arithmetic skills assessment is a required mastery component and must be passed with a score of at least 80% for successful course completion. The arithmetic skills assessment is designed to measure a student's ability to perform arithmetic skills without the use of a calculation device or assistance. This course requires students to perform strategies, methods and/or skills where students perform calculations without the use of any assistance. Assistance includes but is not limited to charts, notes, formulas, and technology. (4 lecture hours)

Prerequisite: Demonstrated geometry competency (level 1), and MATH 0482 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test or a qualifying ACT or SAT math sub-score or a qualifying high school GPA with successful completion of a 4th year high school math class.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1322 (M1 903)**Mathematics for Elementary School Teachers II**

3 Credit Hours

A continuation of MATH 1321. Designed for elementary education majors. Introduction to probability and statistics, measurement, geometric constructions, coordinate geometry and geometric transformations. This course requires students to perform strategies, methods, and/or skills where students perform calculations without the use of any assistance. Assistance includes but is not limited to charts, notes, formulas, and technology. (3 lecture hours)

Prerequisite: MATH 1321 or college equivalent with a grade of C or better and demonstrated geometry competency (level 1).

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1340***History of Mathematics***

3 Credit Hours

The historical development of mathematics and certain mathematical concepts from ancient times to the present, with emphasis given to basic and intermediate mathematics concepts. The focus of this mathematics-driven course will be on the problems mathematicians have faced, and the theory and methodology that were developed to resolve these problems. (3 lecture hours)

Prerequisite: MATH 1218 or college equivalent with a grade of C or better.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1428***College Algebra With Applications***

3 Credit Hours

Students will learn algebra with an emphasis on applications. This course should not be taken by students planning to enroll in calculus. Topics include, but are not limited to, matrices, functions, conic sections, polynomials, exponential and logarithmic functions, and sequences and series. (3 lecture hours)

Prerequisite: Demonstrated geometry competency (level 2), and MATH 0482 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1431***Precalculus I***

5 Credit Hours

Students will learn algebra with an emphasis on concepts needed for calculus. Topics include, but are not limited to, functions, conic sections, matrices and determinants, polynomial theory, rational functions, sequences and series, logarithmic and exponential functions, combinatorial mathematics, and mathematical induction. (5 lecture hours)

Prerequisite: Demonstrated geometry competency (level 2), and MATH 0482 or college equivalent with a grade of C or better, or a qualifying score on the mathematics placement test or qualifying score on the AP Precalculus exam.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1432***Precalculus II: Trigonometry***

3 Credit Hours

Students will learn trigonometry with an emphasis on concepts needed for calculus. Topics include, but are not limited to, formal definition of trigonometric functions and circular functions, radian measure, inverse trigonometric functions, graphs of trigonometric functions and inverse trigonometric functions, trigonometric identities, trigonometric equations, DeMoivre's theorem, solution of triangles, polar coordinates, and applications. (3 lecture hours)

Prerequisite: MATH 1431 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1533 (M1 906)***Finite Mathematics***

4 Credit Hours

Students will be introduced to sets, counting techniques, probability, modeling, systems of linear equations and inequalities, matrix algebra, linear programming, Markov chains, and game theory. This course is intended for students planning to major in business, or the behavioral, social, or biological sciences. (4 lecture hours)

Prerequisite: MATH 1428 or MATH 1431 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1635 (M1 902/BUS 901)***Statistics***

4 Credit Hours

Students will be introduced to elements of descriptive and inferential statistics. Business applications will be emphasized throughout the course. Topics include communication with data descriptions and graphs, probability principles and their use in developing probability distributions, binomial, normal, student-t, chi-square, and F distributions, hypothesis testing, estimation, contingency tables, linear regression and correlation, and one-way ANOVA. (4 lecture hours)

Prerequisite: MATH 1428, MATH 1431, or MATH 1533 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected mathematics topics with a specific theme indicated by course title listed in college class schedule. May be taken three times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required. The precise prerequisites will vary according to the specific mathematical selected topic.

MATH 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within Mathematics to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2000 (M1 900-O)***Survey of Calculus***

3 Credit Hours

Students will study functions, limits, continuity, the derivative, rules for differentiation of algebraic, trigonometric, and the transcendental functions, anti-derivatives and integration, the fundamental theorem of calculus, and techniques of integration. Note: Students may not receive credit for Math 2000 and Math 2134 or Math 2231 or Math 2232. (3 lecture hours)

Prerequisite: MATH 1431 and MATH 1432 or college equivalents, both with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2115 (M1 905/CS 915)***Discrete Mathematics***

3 Credit Hours

Students will be introduced to the formal study of discrete structures in mathematics. Topics include set theory, combinatorial mathematics, logic, graph theory, Boolean algebra, and formal languages. (3 lecture hours)

Prerequisite: MATH 1428 or MATH 1431 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2134 (M1 900-B)***Calculus for Business and Social Science***

4 Credit Hours

Students will be introduced to basic concepts of differential and integral calculus. This course is intended for students planning to major in business, or the behavioral, social, or biological sciences. (4 lecture hours)

Prerequisite: MATH 1431 or college equivalent with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2231 (M1 900-1/MTH901)***Calculus and Analytic Geometry I***

5 Credit Hours

This is the first calculus course for students majoring in science, technology, engineering, and mathematics. Topics include lines, circles, functions, limits, continuity, the derivative, rules for differentiation of algebraic, trigonometric, and the transcendental functions, related rates, mean value theorem, optimization and curve sketching, differentials, Newton's method, antiderivatives and integration, and the fundamental theorem of calculus. (5 lecture hours)

Prerequisite: MATH 1431 and MATH 1432 or college equivalents, both with a grade of C or better or a qualifying score on the mathematics placement test.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2232 (M1 900-2/MTH902)***Calculus and Analytic Geometry II***

5 Credit Hours

Applications of the definite integral, techniques of integration, numerical integration techniques, improper integrals, sequences and series, Taylor and Maclaurin expansions, power series, hyperbolic functions, conics, parametric equations, and polar coordinates. (5 lecture hours)

Prerequisite: MATH 2231 with a grade of C or better or equivalent

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2233 (M1 900-3/MTH903)***Calculus and Analytic Geometry III***

4 Credit Hours

Introduction to vectors and operations on vectors, geometry of space, cylindrical and spherical coordinate systems, vector functions with physics applications, arc length, curvature, multivariate functions, partial derivatives, multiple integrals and their applications, vector fields and their applications, line integrals and their applications, and Green's theorem in the plane. (4 lecture hours)

Prerequisite: MATH 2232 with a grade of C or better or equivalent

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2235***Additional Topics in Vector Calculus***

1 Credit Hour

An extension of Calculus III, covering the curl of a vector field, surface integrals, Stoke's theorem, and the divergence theorem. (1 lecture hour)

Prerequisite: MATH 2233 with a grade of C or better (or college equivalent).

MATH 2245 (MTH 911)***Linear Algebra***

4 Credit Hours

Geometric vectors and vector spaces, matrices and linear transformations, inner product spaces, eigenvalues and eigenvectors, the determinant function, and formal methods of mathematical proof. (4 lecture hours)

Prerequisite: MATH 2232 or equivalent with a grade of C or better.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2270 (MTH 912)***Differential Equations***

4 Credit Hours

Equations of first order with applications, homogeneous linear equations of higher order with constant coefficients, non-homogeneous linear equations of higher order with constant coefficients, Laplace transform methods, applications of higher order differential equations, linear equations with variable coefficients, power series solutions, systems of linear equations, and numerical solutions of first order equations. (4 lecture hours)

Prerequisite: MATH 2233 with a grade of C or better.

MATH 2300***Mathematical Proof***

3 Credit Hours

This course serves as a transition to upper level mathematics with a focus on writing proofs. Topics include: propositional logic, predicate logic, set theory, mathematical induction, number theory, relations and functions. (3 lecture hours)

Prerequisite: MATH 2232 with a grade of C or better.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

MATH 2820***Advanced Selected Topics I***

1-3 Credit Hours

Advanced exploration and analysis of selected mathematical topics with a specific theme indicated by course title listed in college class schedule. This course may be taken three times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required. The precise prerequisites will vary according to the specific mathematical selected topic.

MATH 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MATH 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MATH 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MATH 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Medical Assistant (MASST)

MASST 1125***Introduction to Medical Assisting***

1 Credit Hour

Students will be introduced to the medical assistant profession. Concepts of communication, responsibilities of a medical assistant with an emphasis on medical records, appointment scheduling, and basic administrative procedures are included. (1 lecture hour, 1 lab hour)

Prerequisite: HLTHS 1110 or ANAT 1500 with a grade of C or better, or equivalent; and CIS 1110, CIS 1150, or OFTI 1200 with a grade of C or better, or equivalent; or consent of instructor. Medical Assistant Program admission is required. Students must complete the required pre-registration requirements as stated in the registration packet.

MASST 1130***Introduction to Medical Assisting***

3 Credit Hours

Students will be introduced to the medical assistant profession. Concepts of communication, responsibilities of a medical assistant with an emphasis on medical records, appointment scheduling, and basic administrative procedures are included. (2 lecture hours, 2 lab hours)

Prerequisite: HLTHS 1110 with a grade of C or better, or equivalent or ANAT 1500 with a grade of C or better, or equivalent; and CIS 1110 with a grade of C or better, or equivalent or CIS 1150 with a grade of C or better, or equivalent or OFTI 1200 with a grade of C or better, or equivalent; or consent of instructor. Students must complete the required pre-registration requirements as stated in the Registration Packet.

MASST 1131***Administrative Procedures for the Health Care Office***

2 Credit Hours

Students will be introduced to medical records, appointment scheduling, business communication, and office safety procedures. (2 lecture hours)

Prerequisite: CIS 1110, CIS 1150, or OFTI 1200 with a grade of C or better or equivalent or consent of instructor. Program admission to Medical Assistant or Health Care Office Assistant Program required, or consent of instructor.

MASST 1133***Practice Finance for Medical Assistants***

3 Credit Hours

Students will be introduced to billing, coding, and health care insurance as it relates to physician offices. Introduction to accounts receivable functions and accounts payable procedures is also included. (2 lecture hours, 2 lab hours)

Prerequisite: Concurrent enrollment in CIS 1110 or CIS 1150 or OFTI 1200, or completion of CIS 1110 or CIS 1150 or OFTI 1200 with a grade of C or better; and concurrent enrollment in HLTHS 1110 or ANAT 1500 or ANAT 1551 & ANAT 1552, or completion of HLTHS 1110 or ANAT 1500 or ANAT 1551 & ANAT 1552 with a grade of C or better; or consent of instructor. Program admission to Medical Assistant or Health Care Office Assistant Program required, or consent of instructor.

MASST 2211***Legal and Ethical Aspects of Health Care***

3 Credit Hours

Students will be introduced to legal and ethical aspects of health care with an emphasis on patient's rights, confidentiality, liability, ethical decisions, documentation, consent, and release of information, as they apply to medical assisting. (3 lecture hours)

Prerequisite: CIS 1110 or OFTI 1200 with a grade of C or better, or equivalent or consent of instructor.

MASST 2233***Pathophysiology for Medical Assisting***

3 Credit Hours

Students will explore the functional changes that accompany injuries, disorders, and disease states as they relate to medical assisting. (3 lecture hours)

Prerequisite: ANAT 1500 with a grade C or better or equivalent, or ANAT 1551 and ANAT 1552 both with a grade of C or better or equivalent, or ANAT 1571 and ANAT 1572 both with a grade of C or better, or consent of instructor. Program admission to Medical Assistant Program required.

MASST 2235***Diagnostic Procedures for Medical Assistants***

3 Credit Hours

Students will learn the principles of electrocardiography, diagnostic imaging, clinical lab procedures, and phlebotomy. (2 lecture hours, 3 lab hours)

Prerequisite: MASST 1125 with a grade of C or better, or equivalent or concurrent enrollment in MASST 1125, or consent of instructor.

MASST 2237***Assisting With Medical Specialties***

3 Credit Hours

Students will be introduced to clinical skills required for medical assistants in a variety of physician specialty offices including urgent care settings. (2 lecture hours, 3 lab hours)

Prerequisite: MASST 1125 with a grade of C or better, or equivalent or consent of instructor. Admission to the Medical Assistant Program is required.

MASST 2239***Medical Assistant Clinical Procedures***

3 Credit Hours

Students will study clinical procedures performed by a medical assistant with an emphasis on medication administration, vital signs, patient navigation, nutrition, health promotion, and patient preparation. (2 lecture hours, 3 lab hours)

Prerequisite: MASST 1125 with a grade of C or better, or equivalent or consent of instructor. Admission to the Medical Assistant Program is required.

MASST 2245***Workplace Development for Medical Assistants***

2 Credit Hours

Students will be introduced to professionalism and communication skills for medical office personnel with an emphasis on successfully securing and retaining employment. (1 lecture, 2 lab hours)

Prerequisite: MASST 1125 with a grade of C or better or equivalent or consent of instructor. This course must be taken in students last semester prior to Practicum.

MASST 2250***Medical Assistant Practicum***

3 Credit Hours

Integrated clinical practice in medical assisting with a minimum of 180 clinical contact hours in a qualified medical office. (24 clinical hours)

Prerequisite: Consent of instructor is required. Students must be accepted into the Medical Assistant Program.

MASST 2253***Certified Medical Assistant Exam Prep***

1 Credit Hour

Students will prepare for the medical assistant certification exam offered by the American Association of Medical Assisting (AAMA). The class will include a review of the theory and skills required for medical assisting and prepare students for their final capstone practicum course. (1 lecture hour)

Prerequisite: MASST 1125 with a grade of C or better or consent of instructor. This course must be taken in the last semester prior to practicum.

Microbiology (MICRO)

MICRO 1420***Microbiology***

4 Credit Hours

Students will be introduced to the study of bacteria, viruses, and other microbes including identification techniques, microbial genetics, immunology, growth and control, overview of microbes important to humans, and modern molecular issues. Intended for students in health, food, and environmental fields as well as biology majors. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a C or better, or a qualifying score on the mathematics placement test or a qualifying ACT or SAT math sub-score. Course requires Reading Placement Category One. BIOL 1151 (Principles of Biological Science) or BIOL 1100 (Survey of Biology) is strongly recommended.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

MICRO 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within microbiology to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

MICRO 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

MICRO 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

MICRO 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Associate Dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

Motion Picture/Television (MPTV)

MPTV 1011***Introduction to Motion Picture and Television***

3 Credit Hours

Hands-on introduction to motion pictures and television, emphasizing basic pre-production, production and post-production in animation, audio, television commercials and digital film shorts. Cameras, microphones and basic non-linear editing systems are used. (1 lecture hour, 4 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MPTV 1020***Editing for Motion Pictures and Television***

3 Credit Hours

Introduction to picture and sound editing for motion pictures and television. Explores editing aesthetics, theory and techniques using a non-linear editing system. Emphasis on creation and critique of pieces for in-class use. Material for editing is provided. (6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MPTV 1022 (MC 915)***Audio for Motion Pictures and Television***

3 Credit Hours

Introduction to audio production and post-production for motion pictures and television. Explores audio aesthetics, theory and techniques. Includes field and studio recording, multi-track mixing and audio editing. (6 lab hours)

Prerequisite: MPTV 1011 or consent of instructor.

MPTV 1111***Film/Video Aesthetics***

3 Credit Hours

An introduction to film and video as an art form, including a study of the aesthetic and production elements of the medium. Emphasizes the use of visual and audio designs in cinematic storytelling. Screenings, lectures and production projects will be used. (3 lecture hours)

MPTV 1120***Cinematography***

3 Credit Hours

An introduction to camera and lighting techniques used in film and video productions. Emphasizes aesthetics, light placement, exposure, equipment, movement and crew roles. (6 lab hours)

Prerequisite: MPTV 1011 or consent of instructor.

MPTV 1135 (F2 908)***Introduction to Film Art***

3 Credit Hours

Introduces the basic elements of film as an art form, including cinematography, mise-en-scene, movement, editing, and sound. Social and media contexts of film will also be considered. Through screening, discussion, and critical evaluation of selected films, students develop an ability to interpret cinema through close examination of the relationship between its form and content. Credit cannot be earned for both ENGLI 1135 and MPTV 1135. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

MPTV 1145 (F2 909)***Film History***

3 Credit Hours

Explores the history of film through articulating the evolution of cinema from its inception to the modern era, with emphasis placed on social, historical, and economic contexts that shape changes in film. Through examining a variety of American and international films representing many eras, genres, and filmmakers, students will gain insight into the historical narratives that have shaped film as a mass medium. Credit cannot be earned for both ENGLI 1145 and MPTV 1145. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

MPTV 1154 (HF 908)***Film As Literature***

3 Credit Hours

Explores the process of film adaptation from a variety of sources. Includes examination of films adapted directly and indirectly from prior media, as well as an overview of theoretical approaches to studying film adaptation. Through close study of selected films, students will develop a nuanced, open approach to considering the process of adaptation on screen. Credit cannot be earned for both ENGLI 1154 and MPTV 1154. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MPTV 1213***History of Television***

3 Credit Hours

A survey of the historical development of television, emphasizing a study of television innovations in television broadcast production. Screenings, discussions, and production projects will be used. (3 lecture hours)

MPTV 1220 (MC 916)***Introduction to Television Studio Production***

3 Credit Hours

Introduction to multi-camera studio production and location video recording. Explores directing, techniques, operation of studio and control room, conceptualization, basic script writing, audio board operations and lighting in a studio setting. (6 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MPTV 1222***Writing for Television***

3 Credit Hours

Explores concepts and techniques relevant to screenwriting for sitcom, sketch, drama, news and corporate video production using the television medium. Utilizes screenwriting software. (3 lecture hours)

MPTV 1311***Introduction to Animation***

3 Credit Hours

An introduction to the animated story and character creation using traditional techniques of character animation. (6 lab hours)

MPTV 1313***History of Animation***

3 Credit Hours

Study the animated film from its origins through current times focusing on animation firsts, experimental animations, short subject, propaganda and features. The student explores animation as an art form and a means of self-expression. (1 lecture hour, 4 lab hours)

MPTV 1320***Experimental Animation***

3 Credit Hours

Continued exploration of two-dimensional animation through the creation and screening of experimental animation projects. Students will be exposed to a variety of animation and story-telling techniques. Emphasis will be placed on non-traditional approaches to animation and story telling. Students will have the opportunity to develop their personal visual language through creating and screening their own experimental animations. (6 lab hours)

MPTV 1324***Motion Graphics and Special Effects I***

3 Credit Hours

Explores basic and intermediate aspects of compositing, animating and creating special effects and motion graphics with compositing software. The student learns to add effects or enhance the look of existing footage or create entire animations from inception. Practical application and use of compositing software in the commercial world. (6 lab hours)

MPTV 1422***Video Journalism***

3 Credit Hours

Examines the fundamentals of television news style writing. This course includes techniques for writing strong leads and conversational style scripts, as well as techniques of news gathering, reporting, and interviewing. Students face real time constraints while examining ethical issues and challenges facing today's broadcasters. (3 lecture hours)

MPTV 1423***Announcing and Performing Broadcast News***

3 Credit Hours

Explores the role of on-camera talent in various television formats. Focuses on speech improvement through the study and practice of voice control, proper breathing, and diction. Includes an understanding of the role of the reporter and television news anchor, as well as the role of talent in entertainment genres. (6 lab hours)

Prerequisite: MPTV 1422 or equivalent or concurrent enrollment in MPTV 1422 or consent of instructor.

MPTV 1430***Introduction to Podcasting***

3 Credit Hours

Introduction to podcast production. This course includes an understanding of the role of the podcaster and the development of content. Explores sound production, recording techniques, and the role of talent in entertainment and news genres. (6 lab hours)

MPTV 1431***Introduction to Field Production and Editing***

3 Credit Hours

Introduction to basic television news camera usage and editing, focusing on techniques used to gather video and sound for proper storytelling. Explores editing aesthetics, theory, and practices using a non-linear editing system. (3 lecture hours)

Prerequisite: MPTV 1422 or equivalent or consent of instructor.

MPTV 1440***Courier TV News Production***

3 Credit Hours

Provides hands-on experience with producing, directing, editing, and reporting for the weekly Courier TV newscast. Includes directing weekly newscast, editing and shooting news stories, preparing copy, and on-camera hosting for weekly newscast and portfolio. (6 lab hours)

MPTV 1800***Special Project***

1-3 Credit Hours

Special project courses in the discipline cover topics not otherwise covered by general education courses and other courses in the catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30% but not to exceed 70%. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of the discipline concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit as long as different titles are chosen. (1 to 3 lecture hours)

MPTV 1820***Selected Topics I***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

MPTV 1822***Selected Topics II***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour, 4 lab hours)

MPTV 1823***Selected Topics III***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (6 lab hours)

MPTV 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (2 to 8 lab hours)

Prerequisite: Consent of instructor is required.

MPTV 2022***Screenwriting for Short Forms***

3 Credit Hours

An introduction to screenwriting for motion pictures using short forms. Explores concepts and techniques relevant to screenwriting for features, shorts, television and individual scenes, including structure, characters, dialogue, action, and format. Credit cannot be given for both ENGLI 2255 and MPTV 2022. (3 lecture hours)

Course types: General Education: Humanities (A.A.S., A.G.S.)

MPTV 2031***Pre-Production for Motion Picture and Television***

3 Credit Hours

An introduction to the duties of the motion picture or television producer in commercials, news, documentaries or narrative films. The pre-production process is emphasized, including the areas of problem solving, prioritization, team building, budgeting and scheduling. (3 lecture hours)

Prerequisite: MPTV 1011 or consent of instructor.

MPTV 2032***Screenwriting for Feature Films***

3 Credit Hours

An introduction to writing for feature-length motion pictures. Explores concepts relevant to long-form screenwriting including structure, theme, characterization, plot, action, dialogue, and format. (3 lecture hours)

Prerequisite: MPTV 2022 with grade of C or better, or equivalent, or consent of instructor.

MPTV 2092***Business of Screenwriting***

3 Credit Hours

Exploration of the inner workings of the film industry as it relates to professional screenwriting including finding an agent, pitching, collaborating with producers, and understanding contracts. (3 lecture hours)

Prerequisite: MPTV 2032 with a grade of C or better, or equivalent, or consent of instructor.

MPTV 2113***Directing for Film/Video***

3 Credit Hours

An introduction to concepts and techniques used in directing narrative motion pictures. Emphasizes script analysis, pre-visualization, casting, working with actors and working with crew. (6 lab hours)

Prerequisite: MPTV 1011 with a grade of C or better, or equivalent or consent of instructor.

MPTV 2131***Film/Video Production***

3 Credit Hours

An intermediate study in film and video production, integrating basic skills in screenwriting, producing and directing with further work in cinematography, sound and editing. Includes pre-production, production and post-production on short digital film or video projects for portfolio or festival use. (6 lab hours)

Prerequisite: MPTV 2113 with a grade of C or better, or equivalent or consent of instructor.

MPTV 2134***On-Location TV Production***

3 Credit Hours

Emphasizes techniques for multi-camera on-location productions. Demonstrates how to produce live event production (sports, concerts, and government meetings). Introduces television production skills, the fundamentals of advanced directing, and offers in-depth, hands-on experiences with various television equipment. (6 lab hours)

MPTV 2140***Advanced Film/Video Production***

3 Credit Hours

An advanced workshop in film and video production, emphasizing further work in producing and directing. Includes pre-production and production on one longer digital film or video project for portfolio or festival use. (6 lab hours)

Prerequisite: MPTV 2131 with a grade of C or better, or equivalent or consent of instructor.

MPTV 2223***Commercial Video Production***

3 Credit Hours

A hands-on course in producing commercial video projects for a client. Emphasis on pre-production, production, and post-production of a video project to hone specific producing skills. (6 lab hours)

MPTV 2231***TV News Field Production***

3 Credit Hours

The study and practice of techniques employed in shooting and editing television news. Emphasis is placed on proper field shooting techniques and news story editing. (6 lab hours)

MPTV 2233***Documentary Production***

3 Credit Hours

Students are introduced to documentary filmmaking, emphasizing the technical and aesthetic aspects of documentary production. Production projects are geared toward the development of technical proficiency in small-format documentary pre-production, production and post-production. (6 lab hours)

Prerequisite: MPTV 1020 or consent of instructor

MPTV 2234***Film Directors and Authorship***

3 Credit Hours

Focuses on the study of film through examination of the film director and authorship. Studies of one or more directors, authorship theory, and critical dialogue about the concept of authorship and responses to the work of directors will all be covered. Director-focused content will be chosen by the instructor. Credit cannot be earned for both MPTV 2234 and ENGLI 2234. (3 lecture hours)

Prerequisite: ENGLI 1135, MPTV 1135, ENGLI 1145, MPTV 1145, ENGLI 1154, or MPTV 1154 with a grade of C or better, or equivalent or consent of instructor.

MPTV 2235***Film Genres***

3 Credit Hours

Focuses on the study of film through examination of cinematic genre. Studies of one or more genres, genre theory, and critical dialogue about the concept of genre and its limitations will all be covered. Genre-focused content will be chosen by the instructor. Credit cannot be earned for both MPTV 2235 and ENGLI 2235. (3 lecture hours)

Prerequisite: ENGLI 1135, MPTV 1135, ENGLI 1145, MPTV 1145, ENGLI 1154, or MPTV 1154 with a grade of C or better, or equivalent or consent of instructor.

MPTV 2236***World Cinema***

3 Credit Hours

Explores international cinema, primarily emphasizing films made in countries other than the United States. Studies of the cinema of one or more nations, concepts of national cinematic identity, and critical dialogue, history, and important filmmakers of diverse backgrounds will all be covered. International cinema content will be chosen by the instructor. Credit cannot be earned for both MPTV 2236 and ENGLI 2236. (3 lecture hours)

Prerequisite: ENGLI 1135, MPTV 1135, ENGLI 1145, MPTV 1145, ENGLI 1154, or MPTV 1154 with a grade of C or better, or equivalent or consent of instructor.

MPTV 2237***Documentary Cinema***

3 Credit Hours

Explores documentary cinema that fulfills a variety of cinematic purposes which may include argumentative, profile, essay, historical, and/or nature. Studies of multiple documentary styles, documentary filmmakers, and critical dialogue, history, and spectatorship will all be covered. Documentary cinema content will be chosen by the instructor. Credit cannot be earned for both MPTV 2237 and ENGLI 2237. (3 lecture hours)

Prerequisite: ENGLI 1135, MPTV 1135, ENGLI 1145, MPTV 1145, ENGLI 1154, or MPTV 1154 with a grade of C or better, or equivalent or consent of instructor.

MPTV 2238***Longform Television***

3 Credit Hours

Explores longform narrative television, whether comedic or dramatic, as a multifaceted, sustained storytelling medium. Studies of one or more narrative television series, creators, critical dialogue, history, and spectatorship will all be covered. Longform television content will be chosen by the instructor. Credit cannot be earned for both MPTV 2238 and ENGLI 2238. (3 lecture hours)

Prerequisite: ENGLI 1135, MPTV 1135, ENGLI 1145, MPTV 1145, ENGLI 1154, or MPTV 1154 with a grade of C or better, or equivalent or consent of instructor.

MPTV 2239***Identity and Film***

3 Credit Hours

Explores the multifaceted relationship between films and various elements of identity, such as race, socioeconomic status, gender, sexuality, disability, and nationality. In addition to conducting textual analysis of films, coursework will include examination of film history, film production, audience reception, and critical response as a means to critically probe how films shape and are shaped by identity and culture. (3 lecture hours)

Prerequisite: ENGLI 1135/MPTV 1135 with a grade of C or better, or ENGLI 1145/MPTV 1145 with a grade of C or better, or ENGLI 1154/MPTV 1154 with a grade of C or better, or consent of instructor.

MPTV 2240***Advanced Television Production***

3 Credit Hours

An advanced production course that emphasizes producing and directing techniques for television news. This class builds television production skills, introduces the fundamentals of advanced script writing, and offers more in-depth, hands-on experiences with various television equipment. (6 lab hours)

MPTV 2255***Lies, Manipulation, and Misinformation in Mass Communication***

3 Credit Hours

Discussion and analysis of the history of fake news, news production, consumption and evaluation. Students will have the opportunity to develop the critical thinking skills necessary to be an informed citizen, understand how their worldview affects their interpretation of the news, and create a personal strategy for fact-checking and evaluating the news. (3 lecture hours)

MPTV 2311***Advanced Animation***

3 Credit Hours

An exploration of advanced techniques required in creating an animated project. This includes story development and character creation with a focus on 2D animation using digital techniques. (6 lab hours)

Prerequisite: MPTV 1311 or consent of instructor.

MPTV 2331***3-D Animation I***

3 Credit Hours

An introduction to three-dimensional computer animation, including creating and modifying simple models, lights and camera placement, creating materials, and rendering. (6 lab hours)

MPTV 2332***Game Animation***

3 Credit Hours

Course covers animating for gameplay and in-game cutscenes. Students will design storyboards and translate them into complete animations to be used in gameplay and in-game cutscenes. Topics to include but not limited to storyboarding, rigging, particle effects, audio cues, animation states, in-game camera movements/effects, post process effects, lighting, and in-game cutscene creation. Credit cannot be earned for both CIS 2332 and MPTV 2332. (1 lecture hour, 4 lab hours)

Prerequisite: MPTV 2331 with a grade of C or better or equivalent, or CIS 1212 with a grade of C or better or equivalent, or consent of instructor.

MPTV 2333***Motion Graphics and Special Effects II***

3 Credit Hours

Explores intermediate and advanced aspects of compositing, animating and creating special effects and motion graphics with compositing software. The student learns to add effects or enhance the look of existing footage or create entire animations from inception. Practical application and use of compositing software in the commercial world. (6 lab hours)

Prerequisite: MPTV 1324 with a grade of C or better, or consent of instructor.

MPTV 2340***Three-Dimensional Animation II***

3 Credit Hours

Advanced concepts in three-dimensional computer animation, allowing students to complete a portfolio-level animated project. (6 lab hours)

Prerequisite: MPTV 2331 or equivalent or consent of instructor.

MPTV 2342***Animation Portfolio***

3 Credit Hours

Capstone course of the animation program assesses student competencies through problem-solving activities of the animation industry. Students focus on skill reinforcement and portfolio development. (6 lab hours)

Prerequisite: MPTV 1311, MPTV 1324, and MPTV 2331, all with a grade of C or better or equivalent or consent of instructor.

MPTV 2422***Writing and Reporting II***

3 Credit Hours

Expands on the fundamentals of television news style writing. Includes learning all facets of writing a television news package and the practice of writing more complex stories, such as features, profiles, follow-up stories, and sidebars. (3 lecture hours)

Prerequisite: MPTV 1422 or equivalent or consent of instructor.

MPTV 2430***Content Creator for Social Media***

3 Credit Hours

Practice the role of a social media content creator. This course includes content development, visual storytelling, and audience engagement techniques. Students will create videos, images, live streams, effective communication, and branding on digital platforms. (6 lab hours)

MPTV 2431***Television News Producing***

3 Credit Hours

Focuses on the skills necessary to create content and produce a television news rundown: choosing newsworthy stories, allotting time, and determining transitions with organization, variety, and structure. Students will produce a live television newscast. (6 lab hours)

Prerequisite: MPTV 2422 or equivalent or concurrent enrollment in MPTV 2422 or consent of instructor.

MPTV 2435***Sports Reporting and Broadcasting Techniques***

3 Credit Hours

Advanced course in developing on-camera talent for sports broadcasting. Students will learn skills such as voice control, diction, and interviewing techniques for sports coverage, using single and multi-camera production techniques. (6 lab hours)

MPTV 2440***Advanced On-Air Broadcasting***

3 Credit Hours

Capstone production course that emphasizes creating a student produced newscast. Students practice and experience anchoring, reporting, producing, shooting, and editing regularly scheduled on-air programming. Students will have the opportunity to create a resume portfolio. (6 lab hours)

MPTV 2520***Advanced Editing***

3 Credit Hours

Advanced exploration of editing techniques for motion pictures and television including narrative storytelling, image manipulation, and media management. Emphasis is on creation and critique of videos for in-class use. (6 lab hours)

Prerequisite: MPTV 1020 with a grade of C or better, or equivalent.

MPTV 2820***Advanced Selected Topics I***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

MPTV 2822***Advanced Selected Topics II***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour, 4 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

MPTV 2823***Advanced Selected Topics III***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (6 lab hours)

Prerequisite: At least one course in the discipline or consent of the instructor.

MPTV 2860***Internship (career & Technical Education)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

MPTV 2865***Internship Advanced (career & Technical Education)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Music (MUSIC)

MUSIC 1100 (F1 900)***Music Appreciation***

3 Credit Hours

A general introductory course designed to enhance listening enjoyment and ability. Emphasis on the elements of music, the characteristic styles of major historical periods, and the lives and works of key composers within the Western musical tradition. Course includes in-class demonstrations and attendance at outside musical events. No previous musical study required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1101***Music Theory I***

3 Credit Hours

Introductory studies in music including fundamentals, figured bass realization, analysis of small structures and music writing. Emphasis on diatonic harmony. Simultaneous enrollment in Music 1107 and Music 1171 is required. (3 lecture hours)

Prerequisite: Concurrent enrollment in MUSIC 1107 and MUSIC 1171 or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1102***Music Theory II***

3 Credit Hours

Continued studies in music including figured bass realization, analysis of small forms and music writing. Emphasis on diatonic harmony. Simultaneous enrollment in MUSIC 1108 and MUSIC 1172 is required. (3 lecture hours)

Prerequisite: MUSIC 1101 with grade of C or better, or equivalent and concurrent enrollment in MUSIC 1108 and MUSIC 1172, or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1104 (F1 904)***Introduction to American Music***

3 Credit Hours

A survey of various American contributions to the world's musical culture, with an emphasis on understanding musical terminology and developing the ability to listen intelligently. No previous musical experience is required. Musical examples will include 19th century classical compositions and subsequent gospel, blues, jazz and popular music, presented within a general overview of American culture of the time. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

MUSIC 1105***Music Literature***

3 Credit Hours

Introduction to the characteristic styles of major historical periods and to representative composers. Provides exposure to different performing media and musical forms. Includes in-class demonstrations, extensive listening, and attendance at outside musical events. Assumes a fundamental knowledge of the elements of music. Designed to increase the understanding of music literature through emphasis on development of musical vocabulary. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1106***Fundamentals of Music***

3 Credit Hours

An introduction to the rudiments of music theory and musical notation, including pitch, rhythm, meter, intervals, scales, chords, and musical terminology. Includes elementary ear-training and sight-singing, as well as the study of keyboard geography. No previous musical experience is required. Does not count toward the AFA degree in music. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1107***Aural Skills I***

1 Credit Hour

The study of eartraining and sightsinging utilizing diatonic materials. Course content includes the recognition of intervals, scales and modes, as well as dictation of melodic, harmonic and rhythmic material reinforcing concepts presented in MUSIC 1101. Student must be registered concurrently in MUSIC 1101 and MUSIC 1171. (3 lab hours)

Prerequisite: Concurrent enrollment in MUSIC 1101 and MUSIC 1171 or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1108***Aural Skills II***

1 Credit Hour

The continued study of eartraining and sight-singing utilizing diatonic materials. Course content includes the recognition of chords and dictation of melodic, harmonic and rhythmic material reinforcing concepts presented in MUSIC 1102. Student must be registered concurrently in MUSIC 1102 and MUSIC 1172. (3 lab hours)

Prerequisite: MUSIC 1107 with grade of C or better or equivalent, and concurrent enrollment in MUSIC 1102 and MUSIC 1172, or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1113***Survey of Music Business***

3 Credit Hours

An overview of the business of music as practiced in the United States. Explores several facets of the music industry, including music merchandising, production, publishing, online distribution, public relations, and diverse career paths in arts management. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1115 (F1 903N)***Introduction to World Music***

3 Credit Hours

An introduction to the great variety of musical styles from around the world. Examines representative music of the non-Western world, with an emphasis on its function within the culture of which it is a part. No previous musical experience is required. Emphasizes an understanding of basic musical terminology and the development of improved listening skills. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A.S., A.A.S., A.G.S.)

MUSIC 1120***College of DuPage Concert Choir***

1 Credit Hour

The Concert Choir is a non-auditioned ensemble that sings outstanding choral works of many styles, genres and eras. Repertoire includes short and medium-length works. This course may be taken four times for credit. (3 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1125***College of DuPage Jazz Choir***

1 Credit Hour

The Jazz Choir performs vocal jazz literature representing many styles, including swing, ballad, bebop, Latin and contemporary selections. Study includes improvisation, ensemble singing and microphone technique. This course may be taken four times for credit. (3 lab hours)

Prerequisite: Audition required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1130***College of DuPage Chamber Singers***

1 Credit Hour

The Chamber Singers specialize in vocal chamber music of all periods with particular emphasis on Renaissance madrigal and motets, music of the 20th century, and the music of many cultures. Contemporary music includes major composers, avant-garde music and arrangements of folk, ethnic and popular music. This course may be taken four times for credit. (3 lab hours)

Prerequisite: Audition required and consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1140***Symphony Orchestra***

1 Credit Hour

Preparation and performance of standard orchestral literature. Placement audition recommended. This course may be taken four times for credit. (3 lab hours)

Prerequisite: Placement audition may be requested of new members.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1141***Chamber Orchestra***

1 Credit Hour

Preparation and performance of music for small orchestra. This course may be taken four times for credit. (3 lab hours)

Prerequisite: Placement audition may be requested of new members.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1150***DuPage Chorale***

1 Credit Hour

A large community chorus that performs choral concerts, often in conjunction with a professional orchestra. Repertoire includes standard choral works by Bach, Handel, Mozart and Brahms, as well as modern masterpieces by Orff, Poulenc, Stravinsky and others. Also performs shorter choral works, sacred and secular, American and international, contemporary and historical. No audition necessary. This course may be taken four times for credit. (3 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1170***Class Voice***

2 Credit Hours

A basic introduction to the art of singing and the techniques of voice production. Breathing, phrasing and interpretation. Participation in choral performance groups strongly recommended. (2 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1171***Class Piano I***

1 Credit Hour

Introductory piano for the music major with little or no prior keyboard study. Emphasizes development of basic keyboard skills, music reading, and conceptual understanding pertinent to early level study. Includes introduction to transposition, harmonization, sight reading, improvisation, and basic keyboard repertoire. (2 lab hours)

Prerequisite: Concurrent enrollment in MUSIC 1101 and MUSIC 1107 or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1172***Class Piano II***

1 Credit Hour

Continued group piano study for the non-keyboard music major. Emphasizes major and minor scales, arpeggios, chord inversions, seventh chords, modes, and pedaling, as well as further exploration of transposition, harmonization, sight reading, improvisation, and later elementary-level repertoire. (2 lab hours)

Prerequisite: MUSIC 1171 with a grade of C or better or equivalent, and concurrent enrollment in MUSIC 1102 and MUSIC 1108, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1175***Applied Music: Non-Major***

1 Credit Hour

Private instrumental or vocal instruction to develop musical skills primarily for personal enrichment. Concurrent enrollment in one of the college's instrumental or vocal groups is recommended. This course may be taken four times for credit. (0.5 lecture hour, 1 lab hour)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1178***Voice Performance Workshop***

1 Credit Hour

A workshop for the development of the student's complete vocal performance. Class focuses on interpretation, dramatic presentation and musicianship of the singer. This course may be taken four times for credit. (2 lab hours)

Prerequisite: MUSIC 1170 or equivalent or MUSIC 1175 or equivalent in voice, or MUSIC 1185 or equivalent in voice, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1180***Community Band***

1 Credit Hour

A community band without audition, open to wind, brass and percussion players of all ages. Performances feature marches, orchestral transcriptions, popular works for band, and solos by band members. Rehearsals include concert preparation, sight reading and sectional practice in a supportive atmosphere. This course may be taken four times for credit. (3 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1181***DuPage Community Jazz Ensemble***

1 Credit Hour

DuPage Community Jazz Ensemble is a big band with expanded traditional instrumentation that rehearses weekly and performs at least three times during the academic year. Placement audition is recommended. This course may be taken four times for credit. (3 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1185***Applied Music II: Music Major***

2 Credit Hours

Private instrumental or vocal instruction for students planning to continue music studies at a baccalaureate-granting institution. Concurrent enrollment in one of the college's instrumental or vocal groups is recommended. This course may be taken four times for credit. Faculty assessment recommended to determine if student has technical skills necessary for baccalaureate study. (1 lecture hour, 2 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1190***COD Jazz & Popular Music Ensembles***

1 Credit Hour

Rehearsal and performance of songs from jazz and popular music repertoires, cultivating the skills needed as a professional musician. This course may be taken four times for credit. Placement audition recommended. (3 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1192***Percussion Ensemble***

1 Credit Hour

A chamber ensemble that studies and performs repertoire written specifically for the percussion family as well as transcriptions adaptable to percussion. This course may be taken four times for credit. (3 lab hours)

Prerequisite: Audition required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1193***Guitar Ensemble***

1 Credit Hour

Guitar Ensemble is a large chamber ensemble that performs 20th century American music. This course may be taken four times for credit. (2 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1195***Opera Workshop***

1 Credit Hour

Study of opera and musical theatre repertoire as developed through ensemble participation. Students will develop performances of solos and ensembles from musical theatre and opera works with emphasis on text and character analysis, musical and dramatic decision-making, and presentation. This course may be taken four times for credit. (3 lab hours)

Prerequisite: MUSIC 1170 or equivalent or MUSIC 1175 or equivalent in voice, or MUSIC 1185 or equivalent in voice, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1200***Group Piano for Non-Music Majors***

1 Credit Hour

An introduction to the basics of piano playing, including keyboard skills, musical notation, aural awareness, music theory fundamentals, and elementary repertoire. Designed to accommodate students with little or no prior musical training. Does not count toward the Associate in Fine Arts degree in music. (2 lab hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 1840***Independent Study - Individualized***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2201***Music Theory III***

3 Credit Hours

Continued studies in music including figured bass realization, analysis of larger musical forms, and music writing. Emphasis on chromatic harmony. Simultaneous enrollment in MUSIC 2207 and MUSIC 2271 is required. (3 lecture hours)

Prerequisite: MUSIC 1102 with a grade of C or better or equivalent, and concurrent enrollment in MUSIC 2207 and MUSIC 2271, or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2202***Music Theory IV***

3 Credit Hours

Continued studies in music including figured bass realization, music analysis and music writing. Emphasis on post-romantic and 20th century techniques and styles. Simultaneous enrollment in MUSIC 2208 and MUSIC 2272 is required. (3 lecture hours)

Prerequisite: MUSIC 2201 with a grade of C or better or equivalent, and concurrent enrollment in MUSIC 2208 and MUSIC 2272, or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2207***Aural Skills III***

1 Credit Hour

Continued study of eartraining and sightsinging utilizing chromatic materials. Includes recognition of melodic and harmonic chromaticism, as well as dictation of melodic, harmonic and rhythmic material reinforcing concepts presented in MUSIC 2201. Student must be registered concurrently in MUSIC 2201 and MUSIC 2271. (3 lab hours)

Prerequisite: MUSIC 1108 with a grade of C or better or equivalent, concurrent enrollment in MUSIC 2201 and MUSIC 2271, or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2208***Aural Skills IV***

1 Credit Hour

Continued study of eartraining and sightsinging. Includes the recognition of chromatic and 20th century melodic and harmonic techniques, and dictation of melodic, harmonic and rhythmic material reinforcing concepts presented in MUSIC 2202. Student must be registered concurrently in MUSIC 2202 and MUSIC 2271. (3 lab hours)

Prerequisite: MUSIC 2207 with a grade of C or better or equivalent, and concurrent enrollment in MUSIC 2202 and MUSIC 2271, or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2211***Recording Techniques I***

3 Credit Hours

An introduction to studio recording techniques. Examines the history of electro-acoustic music as well as the basics of physical acoustics. The audio production console, microphones and effect processing are examined in detail. Different methods of sound synthesis are explained with an emphasis on microcomputer applications and the MIDI (Musical Instrument Digital Interface) standard. (2 lecture hours, 3 lab hours)

Prerequisite: Course requires Reading Placement Category One. Recommended: MUSIC 1100 or MUSIC 1101 with a grade of C or better, or equivalent.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2212***Recording Techniques II***

3 Credit Hours

Theory and techniques of digital recording and editing with an overview of analog tape recording. Studio construction, synchronization methods, CD production and magneto-optical media are studied. Formats of digital storage are presented with an emphasis on surround sound and high definition audio. (2 lecture hours, 3 lab hours)

Prerequisite: MUSIC 2211 with a grade of C or better, or equivalent. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2271***Class Piano III***

1 Credit Hour

Continued group piano study for the non-keyboard music major. Includes major and minor scales, major and minor triads, arpeggios, chord inversions, seventh chords, secondary chords, modulation, sonata, and variation form, as well as further exploration of transposition, harmonization, sight reading, score reading, accompaniment, ensemble pieces, and early intermediate-level repertoire. (2 lab hours)

Prerequisite: MUSIC 1172 with a grade of C or better and concurrent enrollment in MUSIC 2201 and MUSIC 2207 or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2272***Class Piano IV***

1 Credit Hour

Class Piano IV – Continued group piano study for the non-keyboard music major. Includes major and minor scales, major and minor triads, arpeggios, chord inversions, seventh chords, secondary chords, modulation, augmented sixth chords, the Neapolitan sixth chord, modes, sonata form, variation form, and rondo form, as well as further exploration of transposition, harmonization, sight reading, score reading, accompaniment and ensemble pieces, and intermediate-level repertoire. (2 lab hours)

Prerequisite: MUSIC 2271 with a grade of C or better and concurrent enrollment in MUSIC 2202 and MUSIC 2208 or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2275***Introduction to Piano Pedagogy***

2 Credit Hours

A study in the art of teaching piano, with emphasis given to the teaching of beginning and elementary level students. Examines theoretical and practical concepts related to the teaching of piano. Open to those who have no previous teaching experience, as well as those who may already be teaching piano. (2 lecture hours)

Prerequisite: At least two years previous piano study. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2820***Advanced Selected Topics I***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college course schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2860***Internship (Career & Technical Education)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2865***Internship Advanced (Career & Technical Education)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

MUSIC 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Nursing (NURSI)

NURSI 1107***Review of Basic Nursing Skills I***

1 Credit Hour

Students will review basic nursing skills presented in the first semester of the the Associate Degree Nursing Program. An emphasis will be placed on patient safety, patient and family education, and promotion of safe and effective care. (1 lab hour)

Prerequisite: NURSI 1130 with a grade of C or better or equivalent.

NURSI 1108***Review of Basic Nursing Skills II***

1 Credit Hour

Students will review nursing skills and related concepts from the first and second semester. An emphasis on patient safety, education, and safe and effective care. (1 lab hour)

Prerequisite: NURSI 1220 and NURSI 1230, both with a grade of C or better, or equivalent.

NURSI 1109***Link to Success***

2 Credit Hours

Students will identify strengths and areas for improvement to promote academic achievement in nursing. Emphasis is placed on targeted content areas, study skills, time management, and testing skills. Students will have the opportunity to apply knowledge through reflective practice. (2 lecture hours)

Prerequisite: Admission to the Nursing Program. Permission of instructor required.

NURSI 1120***Role of the Nurse I***

1 Credit Hour

Students will be introduced to essential concepts and core values of the nursing profession within the context of the four domains: nursing, individual, health, and environment. Emphasis will be placed on nursing process, communication, health promotion, practice standards, and the various roles of the nurse in the delivery of healthcare. (1 lecture hour)

Prerequisite: Admission to the ADN program. MICRO 1420 with a grade of C or better, or equivalent; concurrent enrollment in NURSI 1140 and NURSI 1150; and PSYCH 1100 with a grade of C or better, or equivalent or concurrent enrollment in PSYCH 1100.

NURSI 1130***Introduction to Core Concepts***

4 Credit Hours

Students will be introduced to essential concepts and core values of health within the context of the four domains: nursing, individual, health, and environment. Emphasis will be placed on the concepts of development, functional ability, nutrition, elimination, homeostasis, care giving, and safety. (2 lecture hours, 2 lab hours, 2 clinical hours)

Prerequisite: NURSI 1120, NURSI 1140, and NURSI 1150, all with a grade of C or better or equivalent; concurrent enrollment in NURSI 1170; and PSYCH 1100 with a grade of C or better or concurrent enrollment in PSYCH 1100.

NURSI 1140***Physical Assessment***

2 Credit Hours

Students will be introduced to components of completing a health assessment of individuals with an emphasis on cultural diversity and age-related differences. The application of cognitive, psychomotor, communication, and critical thinking skills in conducting a health assessment will also be explained and assessed. Additionally, students will learn how to identify and communicate both normal and abnormal findings found on health assessments. (1 lecture hour, 2 lab hours)

Prerequisite: Admission to the ADN program. MICRO 1420 with a grade of C or better, or equivalent; concurrent enrollment in NURSI 1120 and NURSI 1150; and PSYCH 1100 with a grade of C or better, or equivalent or concurrent enrollment in PSYCH 1100.

NURSI 1150***Pathophysiology-Altered Health Concepts***

3 Credit Hours

This course introduces students to distinguish between normal and altered physiology, including disease states and alterations in health status throughout the lifespan of diverse populations. This course will also provide an overview of common disease processes and their impact on homeostasis. (3 lecture hours)

Prerequisite: Admission to the ADN program. MICRO 1420 with a grade of C or better, or equivalent; concurrent enrollment in NURSI 1120 and NURSI 1140; and PSYCH 1100 with a grade of C or better, or equivalent or concurrent enrollment in PSYCH 1100.

NURSI 1160***Foundations of Pharmacology***

2 Credit Hours

Students will be introduced to the principles of pharmacodynamics, pharmacokinetics, and medication administration. Students learn preparations for safe administration of pharmaceutical agents to populations across the lifespan. The emphasis is on drug classification, dosage calculation, drug action, side effects, nursing implications, and patient education. (2 lecture hours)

Prerequisite: Admission to the Nursing program is required. NURSI 1120, NURSI 1140, and NURSI 1150, all with a grade of C or better, or equivalent; and MICRO 1420 with a grade of C or better, or equivalent or concurrent enrollment in MICRO 1420; or consent of instructor.

NURSI 1170***Nursing Pharmacology and Disease Process***

3 Credit Hours

Students will explore the relationship between medications and disease processes. Students will focus their knowledge on preparation for the safe administration of pharmaceutical agents to acute and chronic populations across the lifespan. (3 lecture hours)

Prerequisite: NURSI 1150, NURSI 1140, and NURSI 1120, all with a grade of C or better or equivalent; concurrent enrollment in NURSI 1130; and PSYCH 1100 with a grade of C or better or equivalent, or concurrent enrollment in PSYCH 1100. Consent of instructor is required.

NURSI 1220***Health and Illness Concepts I***

5 Credit Hours

This course will expand upon the essential concepts of health and illness within the context of the four domains: nursing, individual, health, and environment. Emphasis will be placed on human response to chronic alterations in multidimensional processes and restoration of homeostasis. (2 lecture hours, 2 lab hours, 4 clinical hours)

Prerequisite: NURSI 1130 and NURSI 1170, both with a grade of C or better, or equivalent; PSYCH 2237 with a grade of C or better or equivalent or concurrent enrollment in PSYCH 2237; ENGLI 1101 with a grade of C or better or equivalent or concurrent enrollment in ENGLI 1101; or consent of instructor.

NURSI 1230***Family Health Concepts I***

5 Credit Hours

This course will expand upon the conceptual principles and values of providing multidimensional nursing care to individuals, children, and families within the context of the four domains: nursing, individual, health, and the environment. Emphasis will be placed on health, wellness, and illness throughout the lifespan. (2 lecture hours, 2 lab hours, 4 clinical hours)

Prerequisite: NURSI 1130 and NURSI 1170, both with a grade of C or better, or equivalent; PSYCH 2237 with a grade of C or better or equivalent or concurrent enrollment in PSYCH 2237; ENGLI 1101 with a grade of C or better or equivalent or concurrent enrollment in ENGLI 1101; or consent of instructor.

NURSI 2120***Health and Illness Concepts II***

5 Credit Hours

Students will explore concepts of health and illness within the context of the four domains: nursing, individual, health, and environment. Concepts emphasized relate to the human response to acute alterations in multidimensional processes and restoration of homeostasis. (2 lecture hours, 2 lab hours, 4 clinical hours)

Prerequisite: NURSI 1220 and NURSI 1230 with a grade of C or better or equivalent; and SPEEC 1100 with a grade of C or better or equivalent or concurrent enrollment in SPEEC 1100, or SPEEC 1120 with a grade of C or better or concurrent enrollment in SPEEC 1120; or consent of instructor.

NURSI 2130***Family Health Concepts II***

5 Credit Hours

The course will continue to explore conceptual principles and values of providing multidimensional nursing care to individuals, children, and families. Concepts will be contextualized within the four domains: nursing, individual, health, and the environment. Concept emphasis is on health, wellness, and illness throughout the lifespan. (2 lecture hours, 2 lab hours, 4 clinical hours)

Prerequisite: NURSI 1220 and NURSI 1230 with a grade of C or better or equivalent; and SPEEC 1100 with a grade of C or better or equivalent or concurrent enrollment in SPEEC 1100, or SPEEC 1120 with a grade of C or better or concurrent enrollment in SPEEC 1120; or consent of instructor.

NURSI 2160***Pharmacology & Disease Processes***

1 Credit Hour

Students will explore the relationship between medication and disease processes. Emphasis will be on reactions to medications, both therapeutically and adversely, in order to predict potential drug interactions. The focus is on critically ill patients across the lifespan, emphasizing medication management of intravenous therapy, drug titration, parenteral nutrition, and medication administration via central lines and epidural routes. (1 lecture hour)

Prerequisite: Admission to the Nursing Program is required. NURSI 1160, NURSI 1220, and NURSI 1230, all with a grade of C or better or equivalent or consent of instructor.

NURSI 2320***Complex Health Problems***

4 Credit Hours

This course will provide analysis of complex health and illness concepts within the context of the four domains: nursing, individual, health, and environment. (2 lecture hours, 6 clinical hours)

Prerequisite: NURSI 2120 and NURSI 2130, both with a grade of C or better or equivalent; concurrent enrollment in NURSI 2320; Humanities course and a Global/Multicultural Studies/Contemporary Life Skills course with a grade of C or better or equivalent, or concurrent enrollment in Humanities course and a Global/Multicultural Studies/Contemporary Life Skills course.

NURSI 2330 (NURSI-2330B)***Role of the Nurse II***

1 Credit Hour

This course will continue to provide analysis of concepts and core values of the nursing profession within the context of the four domains: nursing, individual, health, and environment. Emphasis is placed on leadership, professionalism, collaboration, and safety as a member of an interdisciplinary health care team in a dynamic healthcare system. (1 lecture hour)

Prerequisite: NURSI 2120 and NURSI 2130, both with a grade of C or better or equivalent; concurrent enrollment in NURSI 2320; Humanities course and a Global/Multicultural Studies/Contemporary Life Skills course with a grade of C or better or equivalent, or concurrent enrollment in Humanities course and a Global/Multicultural Studies/Contemporary Life Skills course.

NURSI 2340***Clinical Decision Making Practicum***

2 Credit Hours

This course will assimilate concepts within the context of the four domains: nursing, individual, health, and environment. Emphasis will be placed on accountability, collaboration, and management of patients. Students will begin transitioning to the role of registered professional nurse under the guidance and supervision of a nurse preceptor. (6 clinical hours)

Prerequisite: NURSI 2120 and NURSI 2130, both with a grade of C or better or equivalent; concurrent enrollment in NURSI 2320; Humanities course and a Global/Multicultural Studies/Contemporary Life Skills course with a grade of C or better or equivalent, or concurrent enrollment in Humanities course and a Global/Multicultural Studies/Contemporary Life Skills course.

Nursing Assistant (NURSA)

NURSA 1105***Nurse Assistant Training***

6 Credit Hours

Students will gain theoretical knowledge and basic skills essential to the practice of health care workers who assist nurses in providing person-centered care in a variety of healthcare settings. Training includes simulated practice and opportunity for clinical application to learn basic nurse assistant competencies. This course is approved by the Illinois Department of Public Health, Office of Health Regulations. Successful completion is required for application to sit for the Illinois Nurse Aide Competency written certification exam. NOTE: ALL students must have a valid social security number, meet health requirements, and pass a fingerprint criminal background check. (3 lecture hours, 4 lab hours, 3 clinical hours)

Prerequisite: Advising session attendance or equivalent; select health requirements as explained at the Advising Session. Course requires Reading Placement Category One. Minimum age of 16 due to Illinois state law.

Office Technology Information (OFTI)

OFTI 1100***Keyboarding and Document Fundamentals***

3 Credit Hours

Beginning keyboarding course designed for the student with limited keyboarding experience. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

OFTI 1130***Business Correspondence***

3 Credit Hours

Basic instruction and practice in developing the vital employment skills of planning, writing and formatting effective business communication including sentences, paragraphs, memos, letters, e-mail, and formal and informal reports. Includes current business spelling, punctuation and grammar skills. Keyboarding skills and word processing knowledge are recommended for successful completion of this course. (3 lecture hours)

OFTI 1200 (BUS 902)***Microsoft 365 for Business Professionals***

3 Credit Hours

Introductory course in Microsoft 365 utilizing the basic functions of file management, operating system, browser, word processing, spreadsheet, electronic presentation, and database software. Designed for the office professional or individuals wishing to learn and/or upgrade Microsoft 365 skills. May not be substituted for CIS 1205. Keyboarding skills recommended. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

OFTI 1201***Advanced Microsoft 365***

3 Credit Hours

Advanced course designed to elevate proficiency and collaboration in Microsoft 365 applications including, but not limited to, SharePoint, Teams, Project, Power Automate, Forms, Power BI, OneNote, and CoPilot. (3 lecture hours)

OFTI 1203***E-Mail and Electronic Communication***

3 Credit Hours

Introductory course using Microsoft Outlook emphasizing efficient use of e-mail, calendar, tasks, and notes. Social media for business professionals will be included. Keyboarding skills and knowledge of Windows operating system are recommended. (3 lecture hours)

OFTI 1210***Word Processing I***

3 Credit Hours

Word processing functions using a specific word processing software package, which may include insert, delete, cut, paste, find, replace, document formatting, margins, tabs, spell checker, thesaurus, grammar checker, pagination, page numbering, indent, printing, line spacing, justification, centering, view modes, multiple windows, footnotes, endnotes, headers, footers, disk maintenance, folders and document formats. Introduces merge, tables, borders, images and drawing objects. Keyboarding skills required for successful completion. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

OFTI 1215***Advanced Word Processing/ Desktop Publishing***

3 Credit Hours

Advanced word processing course that integrates desktop publishing applications. (3 lecture hours)

Prerequisite: OFTI 1210 with a grade of C or better, or equivalent.

OFTI 1250***Electronic Presentations for Business Professionals***

3 Credit Hours

Design, prepare and present effective business presentations utilizing current electronic presentation software and design techniques. Techniques for assessing a business presentation situation and delivering a successful electronic presentation. Keyboarding skills recommended for successful completion of this course. (3 lecture hours)

OFTI 1300***Virtual Office Assistant***

3 Credit Hours

Explores fundamentals of providing administrative support remotely through technology. Virtual Office Assistant (VOA) topics include telecommuting, types of virtual offices, setup and management of a virtual office, technologies and skills needed, effective communication, and job opportunities. (3 lecture hours)

OFTI 1820***Selected Topics in Office Technology Information***

3 Credit Hours

Introductory discussion, review and analysis of a selected topic in Office Technology Information, which will be specified in the subtitle of the course as listed in the Class Schedule. Specifically designed to address topics that necessitate a broader scope, greater depth and fuller assimilation of the course materials. This course may be taken four times for credit if different topics are selected each time. (3 lecture hours)

OFTI 1824***Selected Topics in Office Technology Information***

2 Credit Hours

Introductory discussion, review and analysis of a selected topic in Office Technology Information, which will be specified in the subtitle of the course as listed in the class schedule. Specifically designed to address topics that necessitate a broader scope, greater depth and fuller assimilation of the course materials. This course may be taken four times for credit if different topics are selected each time. (2 lecture hours)

OFTI 1827***Selected Topics in Office Technology Information***

1 Credit Hour

Introductory discussion, review and analysis of a selected topic in Office Technology Information, which will be specified in the subtitle of the course as listed in the class schedule. Specifically designed to address topics that necessitate a broader scope, greater depth and fuller assimilation of the course materials. This course may be taken four times for credit if different topics are selected each time. (1 lecture hour)

OFTI 1840***Independent Study - Individualized***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

OFTI 2500***Professional Office Capstone***

3 Credit Hours

Capstone course designed with an emphasis on the professional role of the office support staff. This course focuses on technological advances, decision making, and problem-solving skills. Trends in electronic mail, calendaring, and scheduling will be presented. Includes collecting and presenting data, utilizing software applications, maintaining financial records, developing telephone techniques, arranging travel plans, and organizing events. (3 lecture hours)

Prerequisite: OFTI 1130 or ENGLI 1101, and OFTI 1200, all with a grade of C or better or equivalent or consent of instructor.

OFTI 2600***Professional Development***

3 Credit Hours

Capstone course designed to develop people skills essential in the working environment. For students who have completed at least 60 percent of the credits required for a certificate or degree program. Topics include human relations, professional presence, team building, ethics, stress management, diversity and communication skills relating to individuals, organizations and client relations. Emphasis is placed on employment opportunities including job search skills, advancement opportunities, networking, and interviewing. Keyboarding skills recommended for successful completion of this course. (3 lecture hours)

Course types: Human Relations (A.A., A.S., A.A.S., A.G.S.)

OFTI 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

OFTI 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Ophthalmic Technician (OPTH)

OPTH 2101***Ophthalmic Technician I***

4 Credit Hours

Students will be introduced to the profession of ophthalmic technician, including education on career options in optometry/ophthalmology. Basic eye care assistant knowledge and skills will be expanded on and intermediate skills introduced. Concepts such as clinical optics and biometry will be introduced. (3 lecture hours, 8 clinical hours)

OPTH 2102***Ophthalmic Technician II***

5 Credit Hours

Students will expand their skills of clinical optics and biometry. Students will also be introduced to various eye diseases and disease processes. (4 lecture hours, 8 clinical hours)

Prerequisite: OPTH 2101 with a grade of C or better, or equivalent.

OPTH 2103***Ophthalmic Technician III***

5 Credit Hours

Ophthalmic technician III will be a culmination of information and skills learned as an eye care assistant and ophthalmic technician. Introduction of systemic diseases and how they effect the eyes will be discussed.

Preparation for the Certified Ophthalmic Technician examination is included. (4 lecture hours, 8 clinical hours)

Prerequisite: OPTH 2102 with a grade of C or better, or equivalent.

Philosophy (PHILO)

PHILO 1100 (H4 900)***Introduction to Philosophy***

3 Credit Hours

An introduction to the questions and methods of philosophy. Topics may include free will and determinism, personal identity, the mind-body problem, artificial intelligence, causation and laws of nature, knowledge and skepticism, ethics and value theory, happiness, beauty, the nature and meaning of art, democracy, God, miracles, and more. Readings will be taken from both historical and contemporary authors. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 1110 (H4 904)***Ethics***

3 Credit Hours

Study of the elements of ethics, including principle ethical theories, principles, concepts and meanings, and their practical application to moral problems, dilemmas and decisions. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

PHILO 1112***Biomedical Ethics***

3 Credit Hours

Study of the theories and principles of ethics as applied to the major areas of biomedical ethical concern: moral problems in the professional/patient relationship, in life and death, in allocation of scarce medical resources, and in medical and health care on a social scale. Current issues such as abortion, euthanasia and genetic research are considered. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

PHILO 1114***Business Ethics***

3 Credit Hours

A study of moral issues in business and the broader issues of economic justice through a study of ethical theories and their application to actual case studies. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

PHILO 1116 (H4 904)***Environmental Ethics***

3 Credit Hours

Study of the themes, problems, theories, and moral issues related to the environment from both an anthropocentric and non-anthropocentric perspective. Analysis of and critical response to an environmental issue from a moral perspective. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

PHILO 1120 (H4 906)***Logic***

3 Credit Hours

Introduces the student to the art and science of reasoning. Skills developed include analyzing formal and informal reasoning; identifying errors in reasoning and learning to avoid them; distinguishing different species of reasoning, including deductive and inductive styles of argumentation; and analyzing language for both logical and rhetorical force. Experience in non-remedial, college-level mathematics is strongly recommended. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 1125 (H4 906)***Critical Thinking***

3 Credit Hours

An investigation into and application of the principles of effective thinking in order to develop and enhance one's ability to consciously direct focused mental activity to solve problems, achieve desired goals, evaluate beliefs and guide actions. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 1130***Social and Political Philosophy***

3 Credit Hours

Philosophical inquiry into the basis of social and political authority and practices, as well as the proper relationships between individual and society and government. The nature of society, the state, rights, law and justice are considered with reference to contemporary social and political issues. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Recommended: PHILO 1100.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 1150 (H5 904N)***World Religions***

3 Credit Hours

An introduction to the histories, beliefs, practices, and sacred texts of the major world religions. These include Judaism, Christianity, Islam, Hinduism, Jainism, Buddhism, Sikhism, Daoism, and Confucianism. Credit cannot be given for both RELIG 1150 and PHILO 1150. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

PHILO 1160***History and Philosophy of Education***

3 Credit Hours

Development of Western educational philosophy in historical context. Significant philosophical theories and their influence on modern education. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 1800***Special Project***

1-4 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

PHILO 1840***Independent Study - Individualized***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 2010 (H4 901)***Ancient Philosophy***

3 Credit Hours

An introduction to the major philosophers and philosophical movements of the ancient Western world, including the Presocratics, Socrates, Plato, Aristotle, the Stoics, the Epicureans, the ancient skeptics, and the Neoplatonists. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

PHILO 2011 (H4 902)***Early Modern Philosophy***

3 Credit Hours

An introduction to the major philosophers and philosophical movements of the early modern period, such as Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Rousseau, Hobbes, and Kant. The course will also address the connections between philosophy and science in the early modern period. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

PHILO 2150 (H4 905)***Philosophy of Religion***

3 Credit Hours

Introduces the student to the philosophical analysis and examination of basic religious concepts and beliefs, such as the nature of Ultimate Reality (e.g., God, Tao) and arguments for the existence of the Ultimate Reality. Other topics include religious experience, reason and faith, religion and morality, immortality and others. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 2155 (H4 903N)***Asian Thought***

3 Credit Hours

Introductory overview of selected philosophical and religious systems of Asia. Emphasizes the conceptual and intellectual foundations of a variety of Asian traditions, and includes consideration of the historical and cultural contexts that shape them. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Recommended: PHILO 1100 and/or RELIG 1100.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

PHILO 2200***Introduction to Philosophy of Science***

3 Credit Hours

An introduction to the major philosophical problems raised by science. Topics may include the scope and nature of science, scientific methodology and theory confirmation, scientific explanation, causation, laws, naturalism, scientific realism and its rivals, and various issues in the philosophy of physics and the philosophy of biology. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 2250***Introduction to Philosophy of Art***

3 Credit Hours

Philosophical theories of the creative process in art. The course offers the study and analysis of ideas and concepts about art as a basis for critical assessment of artistic pursuits. Credit cannot be given for both ART 2216 and PHILO 2250. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.)

PHILO 2260***Indian Philosophy***

3 Credit Hours

The course traces early history and development of Indian philosophy. Philosophical themes common to six orthodox and three heterodox systems are investigated. Themes include the theory of reality, epistemology, ontology, metaphysics, self, perception, consciousness, creation, causality, and ethics. Additionally, the course looks at some of the modern developments in Indian philosophy. A number of prominent Indian thinkers and their attempt to relate Indian philosophy to the Western audience are examined. It is recommended that students have completed course work in a related subject area such as Introduction to Philosophy, Logic, or World Religions. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 2270***Philosophy of Happiness***

3 Credit Hours

An introduction to the philosophical study of happiness. Explores such questions as the following: What is happiness? Is there more than one kind of happiness? Is happiness subjective or objective? What is the relationship between happiness and well-being? What is the relationship between happiness and virtue? Is happiness possible? If so, how might we attain it? Can science teach us anything about happiness? Major philosophers of both the ancient and the modern periods will be studied. (3 lecture hours)

PHILO 2300***Metaphysics and Epistemology***

3 Credit Hours

An introduction to the main philosophical questions in metaphysics and epistemology. Metaphysical questions include: What are objects? What kinds of properties and parts do they have? How do they persist through time? What does it mean to say that something is possible or necessary? What is causation, and how does it relate to the laws of nature? Epistemological questions include: What is knowledge, and how can we acquire it? Can we know that we are not in the Matrix? If not, can we really know anything at all? What is required for a belief to be rational? Do all our beliefs require evidence, or only some of them? And what is evidence anyway?. (3 lecture hours)

PHILO 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHILO 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Photography (PHOTO)

PHOTO 1010***Smartphone Photography***

3 Credit Hours

Technical skills for smartphone photography are covered including refinement of exposure, post-image capture processing, and manipulation through various mobile and desktop apps. (6 lab hours)

PHOTO 1100***Fundamentals of Photography***

3 Credit Hours

An exploration of the fundamental principles, techniques, and application of camera-based image making. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHOTO 1101***Foundations of Digital Photography***

3 Credit Hours

Introduction to digital photography, digital editing, digital output, management of digital workflow, with an emphasis on visual literacy. Utilizes digital cameras, cataloging software and editing software. (6 lab hours)

PHOTO 1102***Foundations of Film Photography***

3 Credit Hours

Introduction to black and white analog photography that explores the techniques and applications for making, developing, and printing enlargements of film-camera images in the chemical darkroom. Utilizes analog film-cameras, black and white negative film, and black and white silver gelatin paper. (6 lab hours)

PHOTO 1103***Digital Photography***

3 Credit Hours

Introduction to the principles of digital photography with an emphasis on manual metering, management of a digital workflow, non-destructive editing, and digital output. Utilizes digital cameras, cataloging software, editing software, and printing with commercial photography labs. This course does not cover personal photographic printing. (6 lab hours)

PHOTO 1105***History of Photography***

3 Credit Hours

The historical development of photography as a global art form from 1839 to the present, including critical analysis of types of photographs and aesthetic movements in photography. Examines photographs for their aesthetic and humanistic values, emphasizing photographs as expressions of the ideas, viewpoints, and concepts of photographers within their cultural and social contexts. (3 lecture hours)

PHOTO 1200***Photographic Composition, Color, and Concept***

3 Credit Hours

An exploration of the use of color, composition, and design in the expression of aesthetic, formal, and conceptual concerns in photography. An emphasis will be placed upon the development of individualized strategies toward effective expression and communication. (6 lab hours)

Prerequisite: PHOTO 1101 or PHOTO 1103 with a grade of C or higher, or equivalent, or consent of instructor.

PHOTO 1201***Tools and Techniques for Digital Photography***

3 Credit Hours

Intermediate exploration that expands the technical skills learned for digital photography including camera function, refinement of exposure, digital workflow, post-image capture processing, digital editing, and controlled output of digital images. (6 lab hours)

Prerequisite: PHOTO 1101 or PHOTO 1103 with a grade of C or higher, or equivalent; and PHOTO 1200 or concurrent enrollment in PHOTO 1200; or consent of instructor.

PHOTO 1202***Tools & Techniques for Film Photography***

3 Credit Hours

Technical skills for film photography including refinement of exposure, development, and printing of black and white images. Criteria for selection of appropriate equipment and materials are also covered. (6 lab hours)

Prerequisite: PHOTO 1102 or equivalent or consent of instructor.

PHOTO 1250***Advanced Digital Imaging***

3 Credit Hours

An advanced seminar in digital image-making concepts and techniques, allowing in-depth exploration of extended computer-based photo projects. (6 lab hours)

Prerequisite: PHOTO 1201 or equivalent or consent of instructor.

PHOTO 1260***Alternative Photographic Processes***

3 Credit Hours

Exploration of historical and alternative photographic processes. Experimentation with a variety of camera, darkroom, and digital options in the production of photographic images. (6 lab hours)

PHOTO 1300***Studio Photography 1***

3 Credit Hours

Introduction to the basic concepts of lighting for photography. This will include building lighting scenarios both in a studio and on location. Utilizes various types of lighting equipment including continuous lights, strobe lighting kits, and hand held meters. (6 lab hours)

Prerequisite: PHOTO 1101 or PHOTO 1103 with a grade of C or better or equivalent; and PHOTO 1200 or concurrent enrollment in PHOTO 1200; or consent of instructor.

PHOTO 1400***Color Photography 1***

3 Credit Hours

An introduction to color photographic theory and aesthetics emphasizing the use of transparency and negative film materials. Color applications for digital photography are also addressed. (6 lab hours)

Prerequisite: PHOTO 1101 or equivalent or consent of instructor.

PHOTO 1402***Introduction to Video for Photographers***

3 Credit Hours

An intermediate course that will utilize the audio and video capabilities of HDSLR and mirrorless cameras to explore how photographers can utilize video and sound to create compelling and complex visual narratives for their clients in the commercial and corporate marketplace as well as their personal projects. (6 lab hours)

Prerequisite: PHOTO 1300 and PHOTO 1201 or equivalent, or consent of instructor.

PHOTO 1450***Natural Light and Landscape Photography***

3 Credit Hours

Introduces specialized techniques and research methods for photographing with natural light and in the landscape. Emphasizes application of techniques in field situations. (6 lab hours)

Prerequisite: PHOTO 1200 or equivalent or consent of instructor.

PHOTO 1500 (MC 921)***Photojournalism***

3 Credit Hours

An introduction to the principles and techniques of photojournalism across multiple media platforms, such as use in print, broadcast, and social/connected media. Students will use cameras and smart phones in the production of newsworthy photographs and videos suitable for publication in newspapers, magazines, and other visual communications media. (6 lab hours)

Prerequisite: PHOTO 1201 or equivalent, or concurrent enrollment in PHOTO 1201 or consent of instructor.

PHOTO 1601***Expanded Sources***

1 Credit Hour

An intermediate course in photographic production. Exploring the utilization of other artistic disciplines to inform the photographic process and enhance the photographer's image-making skills. Students will create a photographic project that is informed by interdisciplinary research. (2 lab hours)

Prerequisite: PHOTO 1201 with a grade of C or better or equivalent, and PHOTO 1300 with a grade of C or better, or equivalent, or consent of instructor

PHOTO 1602***Commercial Lighting Workshop***

1 Credit Hour

An intermediate studio lighting workshop with practical experience in fashion, still life, and the use of people in conceptual corporate and advertising photography. (2 lab hours)

Prerequisite: PHOTO 1300, or equivalent, or consent of instructor.

PHOTO 1603***Environmental Portraits Workshop***

1 Credit Hour

Exploration of environmental portraiture, including a brief history and introduction of current applications. The class will focus on techniques for photographing a variety of subject matter on location, both indoors and out, as well as using natural and supplemental lighting. (2 lab hours)

Prerequisite: PHOTO 1300, or equivalent, or consent of instructor.

PHOTO 1604***Electronic Flash Workshop***

1 Credit Hour

Exploration of electronic flash photography. Techniques for on and off camera flash will be discussed; including exposure calculation, TTL system, flash ambient balance, outdoor fill flash, bounce flash, light modifying equipment, and accessories. (2 lab hours)

Prerequisite: PHOTO 1101, or equivalent, or consent of instructor.

PHOTO 1606***Digital Photographic Printing Workshop***

1 Credit Hour

Exploration of digital photographic printing with an emphasis on producing high-quality prints, trouble-shooting common problems, and managing digital files. (2 lab hours)

Prerequisite: PHOTO 1201 or equivalent or consent of instructor.

PHOTO 1608***Large Format Camera Workshop***

1 Credit Hour

Introduction to large format cameras. Emphasis will be placed on equipment control and application. Students will be introduced to historical and contemporary context of this equipment and format. (2 lab hours)

Prerequisite: PHOTO 1102 or equivalent or consent of instructor.

PHOTO 1610***Black & White Analog Printing Workshop***

1 Credit Hour

Intermediate to advanced students will practice black and white analog photography techniques and applications for developing and printing enlargements of film-camera images in the chemical darkroom. Course will utilize analog film cameras, black and white negative film, and black and white silver gelatin paper. (2 lab hours)

Prerequisite: PHOTO 1102 or equivalent or consent of instructor.

PHOTO 1612***Cyanotype & Van Dyke Browns Workshop***

1 Credit Hour

Introduction to the historical processes of Cyanotype & Van Dyke Browns. Emphasis placed on process control, application, and concepts. Students will be introduced to historical and contemporary context for these processes. (2 lab hours)

PHOTO 1614***Platinum and Palladium Printing Workshop***

1 Credit Hour

Introduction to the historical photographic processes of platinum and palladium printing. Emphasis placed on process, control, application, concepts, and historical and contemporary contexts. (2 lab hours)

PHOTO 1616***Salt Printing Workshop***

1 Credit Hour

Introduction to the historical photographic process of salt printing. Emphasis placed on process, control, application, concepts, and historical and contemporary contexts. (2 lab hours)

PHOTO 1618***Gum Bichromate Printing Workshop***

1 Credit Hour

Introduction to the historical photographic process of gum bichromate. Emphasis placed on process, control, application, concepts, and historical and contemporary contexts. (2 lab hours)

PHOTO 1620***Lumen and Phytogram Workshop***

1 Credit Hour

Introduction to the alternative photographic processes of lumen and phytogram printing. Emphasis placed on process, control, application, concepts, and historical and contemporary contexts. (2 lab hours)

PHOTO 1622***Pinhole Photography Workshop***

1 Credit Hour

Students will learn how to transform common objects into pinhole cameras. Emphasis placed on transformation, observation, application, and historical and contemporary contexts for this process. (2 lab hours)

PHOTO 1624***Lens-less Photography Workshop***

1 Credit Hour

Students will learn non-traditional uses of photographic substrates, tools, and equipment to make photographs. Emphasis placed on process, control, application, concepts, and historical and contemporary contexts. (2 lab hours)

PHOTO 1626***Headshot Workshop***

1 Credit Hour

Introduction to making headshot in studio and on location. Emphasis placed on equipment control, light application, contemporary aesthetics, and client delivery. (2 lab hours)

Prerequisite: PHOTO 1300 or equivalent or consent of instructor.

PHOTO 1628***Capture One Workshop***

1 Credit Hour

Students will learn how to use Capture One in a tethered workflow. Emphasis placed on integrating the software into a studio production workflow. (2 lab hours)

Prerequisite: PHOTO 1300 or equivalent or consent of instructor.

PHOTO 1630***Mobile Photography***

1 Credit Hour

Technical skills for mobile photography including refinement of exposure, post-image capture processing for photo and video, manipulation, and social media marketing through various apps for smartphones and tablets. (2 lab hours)

Prerequisite: PHOTO 1101 or equivalent or consent of instructor.

PHOTO 1820***Selected Topics 1***

1 Credit Hour

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lab hours)

Prerequisite: PHOTO 1100 or equivalent, PHOTO 1101 or equivalent and PHOTO 1102 or equivalent or consent of instructor.

PHOTO 1821***Selected Topics 2***

2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (4 lab hours)

Prerequisite: PHOTO 1100, PHOTO 1101, and PHOTO 1102 or equivalent or consent of instructor.

PHOTO 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: 32 semester credits in Photography and consent of instructor.

PHOTO 2002***Product Photography***

3 Credit Hours

An advanced studio course that will emphasize the tools, lighting techniques, and business practices of the professional still-life and product advertising photography marketplaces. (6 lab hours)

Prerequisite: PHOTO 1201 and PHOTO 1300 or equivalent or consent of instructor.

PHOTO 2004***Fashion and Commercial Photography on Location***

3 Credit Hours

An advanced course that addresses photographing on location. Student learns to use research, equipment, lighting techniques, props, models, and visual storytelling to develop a personal aesthetic and resolve client needs. (6 lab hours)

Prerequisite: PHOTO 1201 and PHOTO 1300 or equivalent or consent of instructor.

PHOTO 2006***Studio Fashion and Commercial Portraiture Photography***

3 Credit Hours

An advanced studio course that addresses studio portraiture. The tools, lighting techniques, business practices, and visual narrative of fashion and commercial portraiture photography are emphasized. (6 lab hours)

Prerequisite: PHOTO 1201 and PHOTO 1300 or equivalent or consent of instructor.

PHOTO 2008***Wedding and Family Portraiture***

3 Credit Hours

An advanced studio course that will emphasize the tools, lighting techniques, business practices, and narrative visuals of the professional wedding and family portraiture marketplaces. (6 lab hours)

Prerequisite: PHOTO 1201 and PHOTO 1300 or equivalent or consent of instructor.

PHOTO 2010***Food Photography***

3 Credit Hours

An advanced studio course that will emphasize the tools, lighting techniques, and business practices of the professional food photographer. (6 lab hours)

Prerequisite: PHOTO 1300 or equivalent or consent of instructor.

PHOTO 2012***Architectural Photography***

3 Credit Hours

An advanced studio course emphasizing the tools, lighting techniques, and business practices of an architectural photographer. (6 lab hours)

Prerequisite: PHOTO 1300 or equivalent or consent of instructor.

PHOTO 2100***Extended Photographic Project***

1 Credit Hour

Exploration of skills needed to create a personal or commercial photographic project. An emphasis will be placed on design, technical, conceptual, and research skills to clarify the project idea and support the creation of new photographic work. (2 lab hours)

Prerequisite: PHOTO 1200 with a grade of a C or better or equivalent, PHOTO 1201 with a grade of C or better or equivalent, and PHOTO 1300 with a grade of C or better or equivalent, or consent of instructor

PHOTO 2200***Portrait Photography***

3 Credit Hours

Explores all genres of portrait photography, including commercial portraits, formal and informal studio portraits, and environmental portraiture with film and digital media. (6 lab hours)

Prerequisite: PHOTO 1201 or PHOTO 1202 or equivalent, and PHOTO 1300 or equivalent, or consent of instructor.

PHOTO 2281***Time Based Media I***

3 Credit Hours

An introduction to the concepts and approaches to Time-Based. (4D) Media. Students will develop a broader vocabulary in this area through creation of work in experimental sound editing, video, projection, performance, and installation. Emphasis will be placed on individual conceptual development and art as response to the world around us through interdisciplinary explorations of contemporary issues. (6 lab hours)

Prerequisite: ART 1151 with a grade of C or better, or equivalent, or concurrent enrollment in ART 1151, or PHOTO 1101 with a grade of C or better, or equivalent, or concurrent enrollment in PHOTO 1101, or consent of instructor.

PHOTO 2282***Time Based Media II***

3 Credit Hours

An intermediate expansion of the concepts and approaches to time-based media in a collaborative environment. Creation of time-based work may include web-based and social media platforms, collaborative installation work, public work and interventions, interdisciplinary partnerships, and long-term social practice projects. (6 lab hours)

Prerequisite: ART 2281 with a grade of C or better, or equivalent, or PHOTO 2281 with a grade of C or better, or equivalent, or consent of instructor.

PHOTO 2283***Time Based Media III***

1-3 Credit Hours

Advanced development of time based media portfolio and experiences through personal goal setting in technical skills, mentorship, and further study based on previous work in Time Based Media I and II. (2-6 lab hours)

Prerequisite: ART 2282 or PHOTO 2282 with a grade of C or better, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

PHOTO 2300***Studio Photography 2***

3 Credit Hours

Advanced concepts for solving complex visual communication problems in the studio. Emphasis is on the aesthetic aspects of creating studio photographs. (6 lab hours)

Prerequisite: PHOTO 1300 and PHOTO 1400 or equivalent, and PHOTO 1201 or PHOTO 1202 or equivalent.

PHOTO 2400***Color Photography 2***

3 Credit Hours

Advanced concepts in color photographic theory and aesthetics using transparency film, negative film, and/or digital materials. (6 lab hours)

Prerequisite: PHOTO 1201 and PHOTO 1400 or equivalent.

PHOTO 2700***Professional Photographic Practices***

3 Credit Hours

Capstone photography course that provides basic information for conducting business, with emphasis on the financial, legal, organizational, promotional, interpersonal, and ethical strategies specific to the practice of photography as an occupation or a fine art. Development and creation of marketing materials and plans are also covered. (2 lecture hours, 2 lab hours)

Prerequisite: Student must have completed 20 semester hours of photography course credit or equivalent prior to taking this course or consent of instructor.

PHOTO 2750***Capstone Portfolio***

3 Credit Hours

Creation, preparation, and presentation of photographs in portfolio form as required by employers, galleries, or transfer schools. Each student creates an original portfolio of photographs appropriate to their professional, educational, or personal goals. (6 lab hours)

Prerequisite: Minimum of 33 semester credits in Photography or consent of instructor.

PHOTO 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHOTO 2865***Internship-Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Physical Education, Fitness, and Sports Studies (PHYS)

PHYS 1101***Fitness Conditioning I***

1 Credit Hour

Cardiovascular conditioning, strength training, and other fitness methods are used in guiding students through a balanced workout. Various cardiovascular and weight training equipment in the Chaparral Fitness Center will be used to help students achieve their fitness goals. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1102***Fitness Conditioning II***

1 Credit Hour

Intermediate to advanced cardiovascular and strength training techniques are emphasized in a personally designed fitness program. Strength training and cardiovascular machines will be used in a total-body, balanced exercise program designed to develop the five components of fitness: cardiovascular endurance, muscular strength, muscular endurance, flexibility, and body composition. (2 lab hours)

Prerequisite: PHYS 1101.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1123***Boot Camp Fitness I***

1 Credit Hour

A total body conditioning class with a back to basics non-choreographed approach. Traditional calisthenics and exercises, current training techniques and drills are used to improve all components of fitness. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1124***Boot Camp Fitness II***

1 Credit Hour

A continuation of Boot Camp Fitness I. Fitness workouts with a back to basics approach. Higher intensity exercises and workouts. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1131***Cardio Kickboxing I***

1 Credit Hour

An exercise course that combines boxing, kickboxing, martial arts, aerobics and physical conditioning exercises to enhance cardiovascular and muscular endurance. All done to music. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1132***Cardio Kickboxing II***

1 Credit Hour

An intermediate cardiovascular endurance activity that combines boxing, kickboxing, martial arts, aerobics, and physical conditioning exercises to further increase skill and endurance. (2 lab hours)

Prerequisite: PHYS 1131 or equivalent experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1151***Fitness Walking I***

1 Credit Hour

Fitness walking, power walking and cross country walking techniques. Students assess personal fitness levels and work to improve cardiovascular fitness and set personal goals. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1152***Fitness Walking II***

1 Credit Hour

A continuation of Fitness Walking I. Improvement of cardiovascular fitness through increased intensity and/or distance. (2 lab hours)

Prerequisite: PHYS 1151 or equivalent experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1161***Physical Fitness I***

1 Credit Hour

A personal fitness program that includes progressive conditioning methods. Training exercises include: stretching, core training, jogging, sprinting, weight lifting and weight training. Also included: calisthenics, isometric and isotonic exercises, plyometrics, footwork agility drills and sport specific exercises. (2 lab hours)

Prerequisite: Consent of instructor is required.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1162***Physical Fitness II***

1 Credit Hour

An advanced personal fitness program that includes progressive conditioning methods. Training exercises include: stretching, core training, jogging, sprinting, weight lifting and weight training. Also included: calisthenics, isometric and isotonic exercises, plyometrics, footwork agility drills and sport specific exercises. (2 lab hours)

Prerequisite: PHYS 1161 or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1171***Weight Training I***

1 Credit Hour

An introduction to weight training. Application of the fundamentals of strength training through the use of machine and free weights. Basic anatomy and physiology associated with weight training and safe lifting procedures. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1172***Weight Training II***

1 Credit Hour

Fundamentals of an advanced weight training program. Application of strength training using weight machines and free weights. Anatomy and physiology associated with weight training and safe lifting procedures, along with the design of an individualized strength training program. (2 lab hours)

Prerequisite: PHYS 1171 or previous weight lifting experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1181***Spinning I***

1 Credit Hour

A 50-minute fitness class using spinning (stationary) bicycles. Cardiovascular endurance (aerobic and anaerobic) and muscular strength and endurance are developed. Music is used as a tool to motivate and inspire, as well as to establish the pace, rhythm and energy level of the class. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1182***Spinning II***

1 Credit Hour

A 50-minute fitness class using spinning (stationary) bicycles. Advanced spinning techniques are implemented to further improve fitness level. Aerobic and anaerobic training are used. Music is used to motivate and inspire, as well as to establish the pace, rhythm and energy level of the class. (2 lab hours)

Prerequisite: PHYS 1181 or previous cycling experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1184***Body Sculpting I***

1 Credit Hour

A toning and conditioning course that utilizes a variety of resistance tools to firm and strengthen the entire body. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1185***Body Sculpting II***

1 Credit Hour

A continuation of Body Sculpting I. Workouts designed to further improve muscle endurance and tone. (2 lab hours)

Prerequisite: PHYS 1184 with a grade of S, or equivalent experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1190***SAQSP Training***

1 Credit Hour

Physical conditioning theories and drills for improvement in speed, agility, quickness, strength and power (SAQSP). Applications to individual and team sports, plyometrics and other high intensity fitness activities are covered. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1191***Power Lifting I***

1 Credit Hour

An introductory course in power lifting and training. Basic mechanics of major lifting techniques in the overall Olympic lifts. (2 lab hours)

Prerequisite: PHYS 1171 or previous weight lifting experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1192***Power Lifting II***

1 Credit Hour

A continuation of Power Lifting I. The course advances and builds on the techniques and intensity of the work performed in power lifting. (2 lab hours)

Prerequisite: PHYS 1191 or previous power lifting skills or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1203***Hiking***

1 Credit Hour

Students will prepare for and participate in hiking activities in a variety of different environments and terrains. Wilderness survival techniques and environmental issues will also be covered. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1204***Bicycle Touring***

1 Credit Hour

Outdoor cycling for recreation and fitness. Riding skills, equipment, training techniques, nutrition and planning for bike trips and/or touring. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1205***Angling***

1 Credit Hour

Bait, spin-casting, still-fishing techniques, equipment care, and general fishing skills and practices. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1210***Canoeing***

1 Credit Hour

Fundamental skills of canoeing including basic strokes, safety and canoe camping. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1211***Backpacking***

1 Credit Hour

Basics of backpacking including wilderness survival skills, equipment, conditioning, first aid, environmental issues and etiquette. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1212***Kayaking***

1 Credit Hour

Students will prepare for and participate in fundamental skills of kayaking, including basic strokes, safety, and kayak camping. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1213***Outdoor Living Skills***

1 Credit Hour

Students will discover fundamental skills of camping, including expedition planning, camping techniques, navigation, nutrition, environmental issues and etiquette. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1214***Snowshoeing***

1 Credit Hour

Students will learn the fundamental skills of snowshoeing, including history, conditioning, safety, and winter camping. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1241***Rock Climbing***

1 Credit Hour

An introduction to rock climbing, emphasizing basic skills and techniques. Also included: equipment usage, care of equipment, terminology and safety. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1254***Cross Country Skiing I***

1 Credit Hour

Introduction to cross country skiing skills. Skiing techniques, safety methods, winter survival techniques, care of equipment, orienteering and physical conditioning. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1300***Baseball***

1 Credit Hour

An introduction to the development of proper baseball fundamental skills, techniques and strategies. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1301***Basketball I***

1 Credit Hour

Beginning basketball emphasizing offensive and defensive fundamentals through team play. The following offensive fundamental skills are included: shooting, passing, ball handling, dribbling and player spacing. The following defensive fundamental skills are also included: body position, footwork, arm movements and court position. Team play is emphasized. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1302***Basketball II***

1 Credit Hour

Intermediate basketball emphasizing offensive and defensive fundamentals through team play. Offensive skills included are: jump shooting, movement passing, dribbling with both hands and ball handling with faking. Defensive skills included are: body position, advanced footwork, advanced arm movements and court awareness. Team play concepts and strategies are introduced. (2 lab hours)

Prerequisite: PHYS 1301 or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1304***Theories and Techniques of Football***

1 Credit Hour

Instruction covering a breadth of the advanced schemes, positions, and drills utilized at the college and professional levels of play. Students will gain the base competency in offensive, defensive, and special teams play that is required for the contemporary high-level athlete. (1 lecture hour)

Prerequisite: Previous competitive high school or college football participation or coaching experience is encouraged.

PHYS 1311***Golf I***

1 Credit Hour

Beginning golf. Topics include: grips, stances, chips, putts, full swings, sand shots and club selection. Irons and woods are both used to develop the rhythm and timing of the swing. Also included are terminology, etiquette, scoring, pace of play and golf safety. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1312***Golf II***

1 Credit Hour

Intermediate golf. Progressive development in the fundamental grips, stances and strokes using irons and woods. Swing thoughts, ball flight laws, principles of contact and course management are emphasized. (2 lab hours)

Prerequisite: PHYS 1311.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1321***Pickleball I***

1 Credit Hour

Introduction to the skills and practice of pickleball. Serving, forehand drives, volleys, strategies, rules and scoring. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1322***Pickleball II***

1 Credit Hour

Advanced skills, knowledge and strategies of pickleball. Emphasis on volleying, lobbing, net control, and advanced singles and doubles strategies. (2 lab hours)

Prerequisite: PHYS 1321 or equivalent skill or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1323***Bowling I***

1 Credit Hour

Introduction to the fundamental skills and techniques of bowling. Etiquette, scoring, game procedure and rules are covered. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1324***Bowling II***

1 Credit Hour

Prepares students to advance from the level of a recreational bowler to competitive league bowler. Etiquette, scoring, advanced bowling technique, strategy and a review of the rules. (2 lab hours)

Prerequisite: PHYS 1801 or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1341***Soccer I***

1 Credit Hour

Introduction to the fundamental skills and techniques of kicking, heading, passing and trapping. Team play, strategy and review of the rules. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1342***Soccer II***

1 Credit Hour

A continuation of Soccer I. Soccer II is designed for students with skill and knowledge of the sport. Emphasis placed on intermediate skills, strategies and team play. (2 lab hours)

Prerequisite: PHYS 1341 or equivalent, or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1351***Softball***

1 Credit Hour

Fundamentals of softball: history, rules, strategy, basic skills of fielding, throwing, batting, pitching, base running, and team offensive and defensive philosophies. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1352***Softball II***

1 Credit Hour

An in-depth coverage of advanced softball techniques, position-specific strategies, and game-like situations. Students will enhance knowledge of bookkeeping, subbing, bat, and ball regulations. Prepares students to develop and implement class and practice plans. (2 lab hours)

Prerequisite: Previous softball experience and knowledge preferred.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1361***Tennis I***

1 Credit Hour

Beginning tennis. Topics covered include grips, stances, hitting positions, racquet-face control, forehand, backhand, serve and serve return. Basic tennis rules, scoring and etiquette are also emphasized. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1362***Tennis II***

1 Credit Hour

Intermediate tennis. Topics covered include forehand, backhand, serve, serve return, volley, overhead shots, approach shots and dump volley skills. Instruction in singles and doubles is strategy-based and emphasizes high-percentage shot-making. Rules, etiquette and doubles communication are also included. (2 lab hours)

Prerequisite: PHYS 1361.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1370***Track and Field***

1 Credit Hour

Overview of basic techniques used in track and field events. Training principles and methodology for competitive track and field. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1381***Volleyball I***

1 Credit Hour

Introduction to the basic rules, skills, techniques and strategies of volleyball and their application to game play. Team play and intersquad competition. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1382***Volleyball II***

1 Credit Hour

Advanced skills, techniques and strategies of volleyball and their application to competitive game play. Designed for players with advanced skill and knowledge. Emphasis on team strategies and intersquad competition. (2 lab hours)

Prerequisite: PHYS 1381 or previous competitive volleyball skill or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1401***Swimming I***

1 Credit Hour

Beginning and advanced beginning swimming skills (based on American Red Cross). Water acclimation, floats, glides, kicks, front crawl, combined back stroke, breath control, rhythmic breathing, elementary back stroke, deep water comfort and safety skills. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1402***Swimming II***

1 Credit Hour

A continuation of Swimming I. Further refinement of front crawl and elementary back stroke. Intermediate and advanced swimming strokes and skills: turns, back stroke, breast stroke, side stroke, butterfly and lap swimming for fitness. (2 lab hours)

Prerequisite: PHYS 1401 or equivalent skill or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1421***Water Aerobics I***

1 Credit Hour

Introduction to low impact aquatic aerobic conditioning, emphasizing cardiovascular fitness, strength, flexibility and endurance conditioning. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1422***Water Aerobics II***

1 Credit Hour

A continuation of Water Aerobics I. A variety of aquatic exercises to further develop strength, flexibility and cardiovascular fitness in the water. (2 lab hours)

Prerequisite: PHYS 1421 or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1500***Performance Nutrition***

1 Credit Hour

Provides an understanding of consumption of specific nutrients at the right time and in appropriate amounts to enhance fitness and performance. Addresses formulation of eating plans, nutrition fueling, and specific guidelines for development of strength, power and endurance. (1 lecture hour)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHYS 1554***Healthy Eating***

1 Credit Hour

Basic and practical nutrition information that addresses misconceptions about the nature of food and nutrition in terms of overall wellness.

Designed to provide personal appreciation, understanding and awareness of good nutrition and healthy eating. (1 lecture hour)

PHYS 1555***Personal Fitness Program***

1 Credit Hour

Assessments of components of physical fitness are covered. These components include cardiovascular fitness, muscular strength, muscular endurance, flexibility, body composition, stress and nutrition. Students then use the information ascertained from the assessments to design a personalized exercise prescription. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1556***Stress Management***

1 Credit Hour

Exploration of the dimensions, sources, and physiological responses to stress. Emphasis is on the development of skills and techniques for managing stress. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1603***Zumba I***

0.5-1 Credit Hours

A dance exercise class that is a fusion of Latin & International music and dance moves that creates a dynamic, exciting, and effective workout. Zumba uses a simple dance style borrowing moves from such dances as the merengue, salsa, tango, flamenco. This is combined with aerobic fitness interval training and resistance training to maximize both cardiovascular fitness and body toning benefits. (1 to 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1604***Zumba II***

0.5-1 Credit Hours

A continuation of the Latin infused dance exercise class Zumba I. Increased level of intensity and choreography. (1 to 2 lab hours)

Prerequisite: PHYS 1604 with a grade of S or better, or equivalent or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1701***Aikido I***

1 Credit Hour

A Japanese martial art based on harmony and non-aggression. The learning and performance of basic skills of the activity are stressed. Knowledge and techniques with special emphasis on safety, attitude and etiquette. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1702***Aikido II***

1 Credit Hour

A continuation of Aikido I. A Japanese martial art based on harmony and non-aggression. The learning and performance of basic skills of the activity are stressed. Knowledge and techniques with special emphasis on safety, attitude and etiquette. (2 lab hours)

Prerequisite: PHYS 1701 or equivalent experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1711***Hapkido I***

1 Credit Hour

Hapkido is Korean martial art that emphasizes defensive techniques and Ki (inner power) through the coordination of mind and body. Hapkido teaches blocks, kicks and strikes, but emphasizes joint-locking and pressure points. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1712***Hapkido II***

1 Credit Hour

A continuation of Hapkido I. Hapkido is a Korean martial art that emphasizes defensive techniques and Ki (inner power) through the coordination of mind and body. Hapkido teaches blocks, kicks and strikes, but emphasizes joint-locking and pressure points. These skills allow for effective control of an opponent. (2 lab hours)

Prerequisite: PHYS 1711 or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1731***Jujutsu I***

1 Credit Hour

(Miyama Ryu) The art of Japanese Samurai from which judo and aikido were derived. JuJutsu is based on mechanical principles and is used only for defensive purposes. Benefits are improved fitness, coordination and defensive skill training. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1732***Jujutsu II***

1 Credit Hour

A continuation of JuJutsu I. Advanced techniques and applications. (2 lab hours)

Prerequisite: PHYS 1731 or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1751***Personal Defense***

1 Credit Hour

Introduction to personal defense skills. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1771***Malay Silat I***

1 Credit Hour

Malaysian martial art form that involves defensive principles, self-awareness, skill and sensitivity training. Encompassing both soft and hard styles, the main emphasis is on self-preservation, deception skills and keeping a low profile. Music and a form of dance are also a part of this practice. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1772***Malay Silat II***

1 Credit Hour

A continuation of Malay Silat I. Malay Silat techniques with emphasis on intermediate to advanced level self-defense skills. Also includes the philosophy of the art. (2 lab hours)

Prerequisite: PHYS 1771 with a grade of S or better or college equivalent or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1774***Flow Yoga I***

0.5-1 Credit Hours

A subset of hatha yoga, vinyasa flow is series of poses (asanas) joined together to create a smooth flow. Each asana or movement is synchronized with the breath and each movement is connected to the next. A slower moderate pace differentiates this from power yoga. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1775***Flow Yoga II***

0.5-1 Credit Hours

A continuation of Flow Yoga I, with additional sequences; incorporating intermediate level skills or longer duration of poses. Continued emphasis on the connection of breath and movement. (1 to 2 lab hours)

Prerequisite: PHYS 1774 with a grade of S or better, or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1778***Relaxation & Meditation Techniques***

0.5-1 Credit Hours

A variety of relaxation and meditation techniques are used to enable students to decrease stress, improve focus and develop an everyday peace of mind in the face of today's busy lifestyle. (1 to 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1800***Special Project***

1-3 Credit Hours

Special project courses in Physical Education cover topics not otherwise covered by general education courses and other courses in the Catalog for the Physical Education discipline. These courses require direct experience and focused reflection in an in-depth study of a specific Physical Education topic and/or the critical analysis of contemporary issues in physical education. They are targeted to self-selected students with an interest in the subject matter and involve active participation: The course delivery incorporates an experiential component of no less than 50 percent but not to exceed 75 percent. This experiential component may include field studies, interdisciplinary learning and/or the practical application of physical education concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics etc.)

Course types: PE Activity

PHYS 1820***Selected Topics***

0.5-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (.5 to 3 lecture hours, .5 to 3 lab hours)

PHYS 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within physical education to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with, and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

PHYS 1851***Downhill Skiing I***

1 Credit Hour

Downhill skiing emphasizing the development of basic skills and an understanding of safety procedures. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1852***Downhill Skiing II***

1 Credit Hour

Downhill skiing emphasizing the practice and development of intermediate skiing techniques. Safety procedures and practices are also stressed. (2 lab hours)

Prerequisite: PHYS 1851.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1855***Cross Country Skiing II***

1 Credit Hour

A continuation of Cross Country Skiing I skills. Advanced cross country skiing techniques, increased physical conditioning, orienteering and leadership skills. (2 lab hours)

Prerequisite: PHYS 1854 or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1901***Hatha Yoga I***

1 Credit Hour

Exploration and practice of the yogic system of mind/body awareness and fitness. Students improve muscular strength, endurance, flexibility and concentration. Release of stress and tension through yoga asanas (postures), pranayama (breath control) and meditation. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1902***Hatha Yoga II***

1 Credit Hour

A continuation of Hatha Yoga I. Further exploration of the yogic system of mind/body awareness and fitness. Challenging asanas that require higher levels of strength and balance, as well as increased practice of inversions, twists and backbends are covered. The chakra system of energy flow studied with the asana movements. (2 lab hours)

Prerequisite: PHYS 1901 or equivalent experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1904***Gentle Yoga I***

1 Credit Hour

A hatha yoga class designed to be less stressful on the joints. Asanas (poses) are chosen to emphasize flexibility and relaxation. Meditation techniques and restorative poses are emphasized. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1905***Gentle Yoga II***

1 Credit Hour

A continuation of Gentle Yoga I. (2 lab hours)

Prerequisite: PHYS 1904 with a grade of S or better, or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1911***Pilates I (Mat)***

1 Credit Hour

Students participate in a series of stretching and strengthening exercises based on the Joseph Pilates (pil-LAH-teez) method of body conditioning. Designed to develop muscle strength and tone. This is a mat course; machines are not used. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1912***Pilates II (Mat)***

1 Credit Hour

A continuation of Pilates I. Stretching and strengthening exercises based on the Joseph Pilates method of body conditioning. This is a mat course; machines are not used. (2 lab hours)

Prerequisite: PHYS 1911 with a grade of S or better, or equivalent.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1921***Power Yoga I***

1 Credit Hour

Yoga postures (asanas) are coordinated specifically to the breath and in a continuous flow to not only enhance flexibility, muscular strength and endurance, but also to improve cardiovascular fitness to a further degree than basic yoga. Release of stress through yoga postures, pranayama (breathing), and meditative techniques are also covered. (2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 1922***Power Yoga II***

1 Credit Hour

A continuation of Power Yoga I. Increasingly advanced yoga moves (asanas) are coordinated specifically to the breath and in a continuous flow so as to further the components of physical fitness and overall wellness. Emphasis is on a more challenging workout. Release of stress through yoga postures, pranayama (breathing) and meditative techniques. (2 lab hours)

Prerequisite: PHYS 1921 or equivalent experience or consent of instructor.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), PE Activity

PHYS 2200***Introduction to Physical Education, Exercise Science, and Sport***

3 Credit Hours

A study of the history and development of physical education, exercise science, sport management, fitness, athletics, and special topics related to kinesiology. (3 lecture hours)

PHYS 2201***Introduction to Coaching***

3 Credit Hours

Principles, practices and philosophy of sports coaching for students interested in pursuing a coaching career at the youth, interscholastic or intercollegiate level. (3 lecture hours)

PHYS 2202***Introduction to Sport Management***

3 Credit Hours

Students will study the basic principles, concepts, and functions of sport and fitness management in a variety of environments including youth, interscholastic, intercollegiate, and professional sport settings as well as the traditional health club environment. This course will focus on the unique aspects of managing sport- and fitness-related organizations, products, and services and give a broad overview of additional management-related functions including marketing, risk management, consumer behavior, finance and economics, ethics, and facility & event management. (3 lecture hours)

PHYS 2203***Teaching Sports Skills***

3 Credit Hours

Motor learning, educational methods, and effective techniques for teaching sport and physical skills to school-aged children and adults. Experience in applying teaching techniques to others. (3 lecture hours)

PHYS 2204***Theory and Practice of Baseball***

3 Credit Hours

An introduction to baseball skills in the classroom and on the field covering skill progressions, strategies and teaching pedagogy of all nine positions of the game. (2 lecture hours, 2 lab hours)

PHYS 2205***Theory and Practice of Soccer***

3 Credit Hours

Knowledge, progressions and skills are emphasized in this fundamental approach to soccer. Offensive progressions include: fundamental skills, offensive moves, position breakdown, team formations and special plays. Defensive progressions include: team concepts, individual concepts, man-to-man defenses, zone defenses and special defensive formations. Team play and rules of the game are emphasized. (2 lecture hours, 2 lab hours)

PHYS 2206***Theory and Practice of Basketball***

3 Credit Hours

Knowledge, progressions and skills are emphasized in this fundamental approach to basketball. Offensive progressions include: fundamental skills, offensive moves, position breakdown, team offenses and special offenses. Defensive progressions include: team concepts, individual concepts, neutralization of offensive skills, man-to-man defenses, zone defenses and special defenses. Team play and rules of the game are emphasized. (2 lecture hours, 2 lab hours)

PHYS 2208***Theory and Practice of Football***

3 Credit Hours

Analysis, instruction and demonstration of the fundamental skills in football. A study of the various systems of play and the strengths and weaknesses of each. (2 lecture hours, 2 lab hours)

PHYS 2210***Sports in Society***

3 Credit Hours

This course will provide the students with a basic understanding of the theories and principles related to sociocultural issues, ethics, and morality in the sports industry. Students will be exposed to the current issues and trends that are prevalent in the sports industry. Topics may include, legal issues, amateur vs. professional athletes, technology and the media, issues related to gender, race, and or sexual orientation, and the globalization of the sports industry. (3 lecture hours)

PHYS 2224***Theory and Practice of Track and Field***

3 Credit Hours

Track and field coaching and teaching theories including skill technique for each event, season and daily practice preparation, and coaching methodology. Sprints, relays, hurdles, middle distance, shot put, discus, javelin, hammer, long jump, triple jump, high jump, pole vault and the multi-events are covered. (2 lecture hours, 2 lab hours)

PHYS 2230***Theory and Practice of Volleyball***

3 Credit Hours

Analysis, instruction, demonstration and teaching progression of the fundamentals of volleyball for the physical education major, player and/or future coach. Teaching and coaching methods, offensive and defensive systems and strategies, history and rule interpretations are included. (2 lecture hours, 2 lab hours)

PHYS 2233***Theory and Practice of Fastpitch Softbal***

3 Credit Hours

An introduction to fastpitch softball skills in the classroom and on the field covering skill progressions, strategies and teaching pedagogy of all nine positions of the game. (2 lecture hours, 2 lab hours)

PHYS 2235***Sport Officiating***

1-3 Credit Hours

This course provides students with the opportunity to learn the fundamental concepts of officiating, officiating philosophy, and how to officiate for various sports. Students will learn and practice rules, proper positioning, signaling for each sport, and conflict resolution strategies. Following successful completion of the course, students will earn the opportunity to acquire a sport-specific officiating license. (0.5 to 2 lecture hours, 1.5 to 2 lab hours)

PHYS 2240***Introduction to Sport Psychology***

3 Credit Hours

An examination of the psychological reasons for people participating in various types of competitive and non-competitive sports. Application of psychological concepts to improve the athletes personal growth and development with attention to the coach's role in accomplishing these objectives. Topics covered include: attainment of optimal arousal level, improvement of concentration, mental rehearsal for events, positive reinforcement, goal setting, relaxation techniques, and self fulfillment through non-competitive sports. (3 lecture hours)

PHYS 2244***Lifeguard Training***

2 Credit Hours

Students are trained and prepared to fulfill the requirements of the American Red Cross Life Guard Training certification. Topics include water safety, accident prevention, assist and rescue techniques, and the job requirements of a lifeguard. American Red Cross cards will be issued to those who qualify. Must be able to pass a swimming skills test at the beginning of class. (1 lecture hour, 2 lab hours)

Prerequisite: Swimming test at the discretion of the instructor. (Swimming skills at the level of Swimmer of the American Red Cross program recommended).

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHYS 2251***Living With Health***

3 Credit Hours

Personal and community health issues. Achieving overall wellness and implementing behavior changes through knowledge of current health research. Major topics may include: stress management, anxiety and mood disorders, relationships, nutrition, physical fitness and exercise, weight management, drug use and abuse, cancer, cardiovascular diseases, AIDS and other sexually transmitted diseases. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHYS 2253***CPR Training***

1 Credit Hour

Cardiopulmonary resuscitation (CPR) for adult, child and infant. Automatic external defibrillator (AED) training. (2 lab hours)

Course types: PE Activity

PHYS 2254***Advanced First Aid, CPR and AED***

3 Credit Hours

Comprehensive training in first aid, cardiopulmonary resuscitation and automatic external defibrillators. Emergency Care & Safety Institute (ECSI) certification granted upon successful completion of the course and demonstration of CPR practical skills. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHYS 2255***Care and Prevention of Athletic Injuries***

3 Credit Hours

Introduction to the responsibilities and duties of an athletic trainer including basic fundamentals and techniques, injury care and prevention, injury recognition, emergency care, supportive strapping and wrapping techniques, ordering of supplies, budgeting and the general operation of a training room facility. (3 lecture hours)

PHYS 2256***Applied Procedures and Techniques***

3 Credit Hours

Training room techniques and procedures. Applications to both hands-on practice and competitive field experience under the supervision of certified athletic trainers. (1 lecture hour, 4 lab hours)

PHYS 2257***Athletic Taping Techniques***

1 Credit Hour

Study and practice of supportive strapping, wrapping and taping techniques. Emphasis on proper techniques and appropriate injury situations requiring added support. (2 lab hours)

Course types: PE Activity

PHYS 2258***The Science of Nutrition***

3 Credit Hours

Fundamentals of human nutrition. Basic biochemistry and physiology of all nutrients. Topics include anatomy and physiology of digestion, nutritional requirements, and metabolism. Supplements, diets, and exercise applications are also addressed. (3 lecture hours)

Prerequisite: Reading Placement Category One and Writing Placement Category One are required.

PHYS 2260***The Science of Physical Fitness***

2 Credit Hours

Basic exercise physiology principles as applied to the development of personal and professional fitness programs. Major topics include muscle cell physiology, energy metabolism during exercise, nutrition for fitness, cardiovascular training, and muscular conditioning. (2 lecture hours)

PHYS 2261***Applied Kinesiology***

3 Credit Hours

Functional anatomy and physiology essential to those in physical education, fitness, and sport-related professions. Covers skeletal and muscular tissues and cellular anatomy and physiology, emphasizing the musculoskeletal system. In addition, detailed movement analysis for exercise and sport applications will be examined. (3 lecture hours)

Prerequisite: Reading Placement Category One and Writing Placement Category One are required.

PHYS 2263***Foundations of Personal Training***

3 Credit Hours

This course offers a comprehensive knowledge base in personal training. Students will gain an understanding of the role and scope of the personal trainer, basics of behavior change and motivation, exercise adherence strategies, fitness assessment and exercise prescription, exercise programming for a wide variety of clientele, and general business practices. After course completion, students will have the option of taking the American Council on Exercise (ACE) personal training certification exam for an additional fee. (2 lecture hours, 2 lab hours)

Prerequisite: Applied Kinesiology PHYS 2261 is highly recommended prior to taking this course.

PHYS 2270***Introduction to Sports Marketing***

3 Credit Hours

This course will cover the basic theories and principles of sports marketing and communications from sports and recreational facilities to professional and amateur sports. Reveals how to study and understand the market, develop a marketing strategy, clarify a sports organization's needs and goals, and implement marketing plans through sponsorship, fundraising, licensing, pricing, promotions, advertising, broadcasting and sales. (3 lecture hours)

PHYS 2800***Special Project***

1-3 Credit Hours

Special project courses in physical education cover topics not otherwise covered by general education courses and other courses in the Catalog for the Physical Education discipline, while building upon academic knowledge and skills acquired in introductory-level Physical Education classes. These courses require direct experience and focused reflection in an in-depth study of a specific physical education topic and/or the critical analysis of contemporary issues in physical education. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 50 percent but not to exceed 75 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex physical education concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in Physical Education or consent of instructor

Course types: PE Activity

PHYS 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHYS 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHYS 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHYS 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Physical Therapist Assistant (PHYTA)

PHYTA 1100

Introduction to Physical Therapy

2 Credit Hours

Students will be introduced to an overview of the physical therapy profession within the health care delivery system from a historical, philosophical, and organizational context. Students will explore the physical therapy frame of reference in various practice and treatment areas and discuss personal and professional qualities of the health care provider, professional ethics, and the psychological aspects of treatment. (2 lecture hours)

Prerequisite: Consent of instructor is required.

PHYTA 1109

Basic Health Care Skills and Principles of Soft Tissues Techniques

3 Credit Hours

Students will be instructed in basic health care skills used in physical therapy. Other topics will include identification of anatomical structures and therapeutic intervention techniques. (2 lecture hours, 3 lab hours)

Prerequisite: Admission to Physical Therapist Assistant program or consent of instructor.

PHYTA 1112

PTA Kinesiology II

3 Credit Hours

Continuation of application of biomechanical principles and analysis of human movement. Explores in detail the relationship of these principles to the elbow, forearm, wrist, hand, lower extremity, head, neck, trunk, and to gait and posture. (2 lecture hours, 2 lab hours)

Prerequisite: Admission to Physical Therapist Assistant program and PHYTA 1111 with a grade of C or better or equivalent or consent of instructor.

PHYTA 1114

PTA Total Patient Care

1 Credit Hour

Students will discuss topics related to the physical therapy profession, including psycho-emotional aspects of caring for the patient, psycho-social problems of the ill and disabled, aging, medical ethics and professional ethics. (1 lecture hour)

Prerequisite: Admission to Physical Therapist Assistant program or consent of instructor.

PHYTA 1202

PTA Therapeutic Exercise

2 Credit Hours

Continuation of therapeutic exercise for all ages, including stretching exercise. Emphasis is on the development of exercise programs for correction of postural dysfunction and gait abnormalities including the use of orthotic devices relevant to mobility and daily function. Focus on therapeutic intervention for the patient following an amputation, including the use of prosthetic devices relevant to mobility and daily function. Assessment and intervention of Activities of Daily Living (ADL) issues are also emphasized. (1 lecture hour, 2 lab hours)

Prerequisite: Admission to Physical Therapist Assistant program and PHYTA 1211 with a grade of C or better or consent of instructor.

PHYTA 1205

PTA Kinesiology

5 Credit Hours

Students will study and analyze human movement utilizing principles of biomechanics, musculoskeletal anatomy, and neuromuscular physiology. Emphasis will be on basic biomechanics, the articular system, the skeletal system, the muscular system, the nervous system, and development of exercise programs for correction of postural dysfunction and gait abnormalities. (4 lecture hours, 2 lab hours)

Prerequisite: Admission to Physical Therapist Assistant program is required. ANAT 1551 or ANAT 1571 with a grade of B or better, or equivalent or consent of instructor.

PHYTA 1207

PTA Pathophysiology

2 Credit Hours

Students will study diseases and disorders commonly seen in physical therapy practice. Students will be provided an overview of etiology, manifestations, and treatment of significant diseases with an emphasis on the musculoskeletal, nervous, and cardiopulmonary systems. (2 lecture hours)

Prerequisite: Admission to Physical Therapist Assistant program or consent of instructor. ANAT 1551 with a grade of B or better or ANAT 1571 with a grade of B or better, or equivalent.

PHYTA 1211

PTA Therapeutic Assessment & Basic Intervention

4 Credit Hours

Students will learn the basic principles of exercise, basic evaluation skills pertaining to joint and muscle function, the development of exercise programs for correction of specific conditions, and goniometric and manual muscle testing assessment. (2.5 lecture hours, 4.5 lab hours)

Prerequisite: Admission to Physical Therapist Assistant Program is required and PHYTA 1109 with a grade of B or better, or equivalent or consent of instructor.

PHYTA 1221

PTA Clinical Practicum I

1 Credit Hour

Provides initial opportunity to implement a variety of physical therapy treatment plans. Students will be oriented to the roles and responsibilities of the physical therapist assistant (PTA) and will have their initial supervised contact with clients having physical dysfunction. (0.5 lecture hours, 8 clinical hours)

Prerequisite: Admission to Physical Therapist Assistant program and PHYTA 1201 with a grade of C or better or consent of instructor.

PHYTA 1301

PTA Therapeutic Modalities

4 Credit Hours

Students will learn therapeutic intervention utilizing physical agents in the treatment of acute and chronic diseases and injuries. Students will be introduced to wound care, burn care, and infection control. (2.5 lecture hours, 4.5 lab hours)

Prerequisite: Admission to Physical Therapist Assistant program and PHYTA 1205 with a grade of B or better, equivalent or consent of instructor.

PHYTA 1840***Independent Study - Individualized***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

PHYTA 2103***PTA Neuromuscular and Cardiopulmonary Rehabilitation***

4 Credit Hours

Students will learn physical therapy techniques used in the assessment and intervention of patients with neurological disorders and cardiovascular and pulmonary disorders. (2.5 lecture hours, 4.5 lab hours)

Prerequisite: PHYTA 1301 with a grade of B or better, or equivalent or consent of instructor.

PHYTA 2104***PTA Special Patient Populations***

3 Credit Hours

Students will be provided with an overview of physical therapy for special patient populations including pediatrics, geriatrics, bariatrics, lymphedema, women's health, post-amputation, and patients with prosthetics. (2.5 lecture hours, 1.5 lab hours)

Prerequisite: PHYTA 1301 with a grade of B or better, or equivalent or consent of instructor.

PHYTA 2110***PTA Documentation***

1.5 Credit Hours

Observation, interviewing and medical note-writing techniques. Subject matter to include various assessment, treatment plan, progress note, and discharge summary formats. Emphasis on writing style, reimbursement guidelines and legal aspects of note writing. (1.5 lecture hours)

Prerequisite: Admission to Physical Therapist Assistant program or consent of instructor.

PHYTA 2112***PTA Advanced Orthopedic Rehabilitation***

4 Credit Hours

Students will focus on orthopedic disorders and appropriate therapeutic intervention. Students will continue their study of therapeutic exercise, with a focus on principles and application of progressive-resistive exercise, upper and lower extremity joint mobilization, and exercise progression. (2.5 lecture hours, 4.5 lab hours)

Prerequisite: Admission to Physical Therapist Assistant Program or consent of instructor. PHYTA 1301 with a grade of B or better, or equivalent.

PHYTA 2122***PTA Clinical Practicum I***

1.5 Credit Hours

Students are provided an initial opportunity to implement a variety of physical therapy treatment plans in the clinic. Students will be oriented to the roles and responsibilities of the physical therapist assistant (PTA) and will have their initial supervised contact with clients. Students are provided opportunities to follow established treatment programs, provide individual patient treatments, and practice hands-on techniques. This course can only be taken on a pass/fail basis. (0.5 lecture hours, 9 clinical hours)

Prerequisite: Admission to Physical Therapist Assistant Program or consent of instructor and PHYTA 1301 with a grade of B or better or consent of instructor.

PHYTA 2212***PTA Advanced Orthopedic Rehabilitation***

4 Credit Hours

Continuation of the study of therapeutic exercise. Focus is on principles and application of progressive-resistive exercise, upper and lower extremity joint mobilization, and exercise progression. Emphasis is on orthopedic disorders and appropriate therapeutic intervention. (2 lecture hours, 4 lab hours)

Prerequisite: Admission to Physical Therapist Assistant Program and PHYTA 1202 with a grade of C or better, or equivalent or consent of instructor.

PHYTA 2214***PTA Professional Issues***

1 Credit Hour

Students will review and discuss topics related to the Physical Therapy profession, including Medicare Prospective Payment System (PPS), current trends, pharmacology, cultural diversity, research, licensure, and other legal and ethical aspects that influence current practice. (1 lecture hour)

Prerequisite: PHYTA 2103 with a grade of B or better, or equivalent or consent of instructor.

PHYTA 2223***PTA Clinical Practicum II***

2.5 Credit Hours

Students continue their clinical experience with opportunities to further improve their intervention skills. Students will reinforce concepts of proper body mechanics, therapist and client safety, communication skills, documentation of goals, intervention plans, and patient progress. This course can only be taken on a pass/fail basis. (0.5 lecture hours, 16 clinical hours)

Prerequisite: PHYTA 2122 with a grade of S or better, or equivalent.

PHYTA 2224***PTA Clinical Practicum III***

3 Credit Hours

Students' clinical experiences conclude with the opportunity to build upon knowledge and skills developed in prior clinical experiences. Focus is on entry level competencies in providing comprehensive and consecutive interventions within the larger framework of departmental operations. This course can only be taken on a pass/fail basis. (0.5 lecture hours, 20 clinical hours)

Prerequisite: PHYTA 2223 with a grade of S or better, or equivalent.

PHYTA 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PHYTA 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Physics (PHYSI)

PHYSI 1100 (P1 900L)***Physics***

4 Credit Hours

Conceptual study of laws of motion, forces, energy and momentum, properties and states of matter, heat and thermodynamics, wave motion, sound, light, electricity and magnetism, and atomic and nuclear physics. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0481 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1115***Lab Microprocessors and Microcontrollers***

1 Credit Hour

Students will be introduced to basic programming of microprocessors and microcontrollers that may be used in physics. This class will taught in a lab format with hands-on projects. (2 lab hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1150 (P1 901)***Energy and Society***

3 Credit Hours

The applications of physics to society are studied. This may specifically include the study of energy, thermodynamics, electrical power generation, electric circuits, nuclear power, and nuclear weapons. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0482 with a grade of C or better or a qualifying score on the mathematics placement test or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1152***Applications of Physics in Society***

4 Credit Hours

Study of applications of physics to society. Includes the study of energy, thermodynamics, electrical power generation, electric circuits, nuclear power, and nuclear weapons. Lab component included. Students receive credit for either PHYSI 1150 or PHYSI 1152. (3 lecture hours, 3 lab hours)

Prerequisite: MATH 0465 or MATH 0482 with a grade of C or better or a minimum score on the mathematics placement test.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1180 (P1 900)***Quarks to Cosmos: Discoveries in the Modern Era***

3 Credit Hours

Survey of physics of the twentieth century for the non-science major. Topics include relativity, quantum mechanics, elementary particles and cosmology. Topics of classical physics (mechanics, electricity, and heat) as a foundation are included. (3 lecture hours)

Prerequisite: MATH 0465 or MATH 0482 with a grade of C or better, or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1201 (P1 900L)***General Physics I***

5 Credit Hours

Algebra and trigonometry-based study of classical linear and rotational kinematics and dynamics (including work, energy, impulse, momentum, and collisions), fluids, heat, thermodynamics, periodic motion, and wave motion. Course is intended for students that have taken high school physics and have experience with right-angle trigonometry. (Students without high school physics are encouraged to complete PHYSI 1100 before enrolling in this course.) (4 lecture, 2 lab hours)

Prerequisite: MATH 1115 or MATH 1431 with a grade of C or better or equivalent, or a qualifying score on the mathematics placement test, or a qualifying A.C.T. or S.A.T. math sub-score. Course requires Reading Placement Category One.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1202***General Physics II***

5 Credit Hours

Algebra-based study of electrostatics, electric fields, Gauss' law, capacitance, current, resistance, magnetic forces and fields, electromagnetic induction, DC and AC circuits, electromagnetic waves, mirrors, lenses, optics, and modern physics. Note: The standard prerequisite is PHYSI 1201. While PHYSI 2111 may serve as an alternative prerequisite for taking this COD course, students are advised to check with their intended transfer institution(s) to ensure that the thermodynamics covered in PHYSI 1201 is not a requirement prior to embracing this alternative. (4 lecture hours, 2 lab hours)

Prerequisite: PHYSI 1201 or PHYSI 2111 with a grade of C or better.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1820***Selected Topics***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2111 (P2 900L/PHY 911)***Physics for Science and Engineering I***

5 Credit Hours

Calculus-based study of classical linear and rotational kinematics and dynamics, including work, energy, impulse, momentum, collisions, gravitation, periodic motion, and wave motion. (Students without a strong high school physics background are encouraged to complete PHYSI 1201 before enrolling in this course.) (4 lecture hours, 3 lab hours)

Prerequisite: MATH 2231 with a C or better or equivalent.

Course types: General Education: Physical Sciences (A.A.S., A.G.S.),

General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2112 (PHY 912)***Physics for Science and Engineering II***

5 Credit Hours

Calculus-based study of electrostatics, electric fields, Gauss' Law, capacitance, current, resistance, magnetic forces and fields, electromagnetic induction, AC circuits, Maxwell's equations, electromagnetic waves, geometric optics and physical optics. (4 lecture hours, 3 lab hours)

Prerequisite: PHYSI 2111 with a C or better.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2115***Physics for Science and Engineering III***

4 Credit Hours

Calculus-based study of fluids, thermodynamics, special relativity, introductory quantum mechanics, nuclear physics and particle physics. (3 lecture hours, 3 lab hours)

Prerequisite: PHYSI 2112 with a grade of C or better.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the discipline, while building on academic knowledge and skills acquired in introductory-level classes. These courses require direct experience and focused reflection in an in-depth study of a specific topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex geographic concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2820***Advanced Selected Topics***

1-3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2827***Advanced Selected Topics II***

1 Credit Hour

Advanced exploration and analysis of selected topics with a specific theme indicated by the course title listed in the college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2840***Experimental/Pilot Class***

1-6 Credit Hours

Exploration and analysis of topics within the discipline. This course is used to pilot a proposal for a permanent discipline course. This course may be taken four times for credit as long as different topics are selected. (0 to 6 lecture hours, 0 to 12 lab hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

PHYSI 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

Political Science (POLS)

POLS 1100 (S5 903)***Introduction to Political Science***

3 Credit Hours

An introduction to the study of political science, its methods of research, key concepts, contemporary problems, and approaches to understanding and solving them. Course includes discussions and comparisons of key political ideologies, theories, systems, biases, and policies. Focus on analysis of political problems on a national and global level as well as a definition of central concepts. Students will learn to critically evaluate claims and to practice tools of political science research. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1101 (S5 900)***American Politics***

3 Credit Hours

Analysis of the dynamics and processes of the evolving American constitutional democracy: its origins, structure and problems. Areas of study include an in-depth discussion of the U.S. Constitution, federalism, civil liberties, interest groups, political parties, campaigns, elections, mass media, Congress, the courts and the presidency. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1105 (S5 902)***State and Local Politics***

3 Credit Hours

Students will be introduced to the basic principles of state constitutions and the institutions they create. Additional topics will include the structure and function of state legislatures, courts and chief executives. The structure and function of city, county and other local governments is also considered as is the role of political parties, pressure groups and public opinion. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

POLS 1160***Modern Political Ideologies***

3 Credit Hours

Introduction to major political philosophies and ideologies from John Locke to present-day political ideas. Topics may include Communism, Fascism, Liberalism, Conservatism, Utilitarianism, Capitalism, post-modernism, social contract theory and Libertarianism. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). The experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1820***Selected Topics I***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1821***Selected Topics II***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1822***Selected Topics III***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour, 4 lab hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1823***Selected Topics IV***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (6 lab hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1824***Selected Topics V***

2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2101***Urban Politics***

3 Credit Hours

Students will examine the development, forms, functions, powers, and problems of urban government in the United States. An emphasis will be placed on the struggle for and development of power and influence in metropolitan areas and intergovernmental relations. Pressure group activity, administrative organization, and fiscal responsibilities will also be introduced. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2203 (S5 905)***Comparative Politics***

3 Credit Hours

Introduction to the comparative study of developed and developing political systems. The politics and governments of selected countries are analyzed in their appropriate historical, social, economic and political settings. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

POLS 2220 (S5 904)***World Politics***

3 Credit Hours

Introduction to international relations and global politics. Discussion of different ideological perspectives such as Idealism and Realism, structure and function of international organizations, foreign policy and the role of diplomacy. Analysis of causes and consequences of war, poverty, international trade, international law, treaties, increase in population and global environmental destruction. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

POLS 2221***Politics of the Middle East***

3 Credit Hours

Acquaints students with one of the key contemporary political problems in today's international arena. Few regions of the world provoke more interest, controversy or international crises than the Middle East. This course surveys the geography, history, politics and social development of this dynamic and volatile region for those with no previous knowledge or study of the Middle East. (3 lecture hours)

Prerequisite: POLS 1100 or equivalent, or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

POLS 2230***Introduction to Peace and Conflict Studies***

3 Credit Hours

An overview of a broad spectrum of factors that prevent a peaceful solution to human conflicts. Define and analyze different conceptions of peace, explore various forms of violence and examine its conditions. Evaluate strategies that lead to peaceful methods of conflict resolution and management of existing conflict. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

POLS 2240***Introduction to U.S. Foreign Policy***

3 Credit Hours

An overview of U.S. foreign policy with six decades. The course provides a theoretical and historical overview of the major perspectives of the field as well as an evaluation of the actors and institutions that formulate foreign policy. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2250***Comparative Politics of Latin America and Caribbean***

3 Credit Hours

Examination of general themes in the politics of Latin America and the Caribbean with a particular focus on multiple countries throughout Latin America and the Caribbean. Focus on the comparative historical experiences of the region spanning the past five centuries. Also examines development of each country with a focus on social, economic and political institutions and issues of recent significance. (3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline, while building on academic knowledge and skills acquired in introductory-level classes. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2820***Advanced Selected Topics I***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. May be taken three times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2821***Advanced Selected Topics II***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2822***Advanced Selected Topics III***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour, 4 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2823***Advanced Selected Topics IV***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college Class Schedule. This course may be taken four times for credit as long as different topics are selected. (6 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

POLS 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

Psychology (PSYCH)

PSYCH 1100 (\$6 900)***General Psychology***

3 Credit Hours

A survey of the study of behavior and mental processes with emphasis on the scientific nature of contemporary psychological investigation.

Areas discussed include research methods, biological psychology, cognitive psychology, behavioral psychology, social psychology, developmental psychology, and clinical/abnormal psychology. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 1140***Human Sexuality***

3 Credit Hours

An examination of human sexuality from a variety of psychosocial perspectives, with an emphasis on biological, psychological and cultural aspects. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

PSYCH 1150***Adjustment***

3 Credit Hours

A survey of the theories of personality as they relate to dealing effectively with the adjustive demands of everyday life. The course includes coverage of the dynamics of stress and coping, interpersonal relationships including ethnic, racial and gender issues, and approaches to personal growth. Not IAI approved for psychology major credit. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

PSYCH 1800***Special Project***

1-3 Credit Hours

Special Project – Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 1820***Selected Topics I***

1-3 Credit Hours

Selected Topics I – Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

PSYCH 1840***Independent Study***

1-4 Credit Hours

Independent Study – Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2205***Physiological Psychology***

3 Credit Hours

Examines physiology as it relates to behavior, including the influence of the nervous system, the endocrine system, genetics, and the body's chemistry on sensation, motivation, learning and other behavioral processes. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2210***Industrial and Organizational Psychology***

3 Credit Hours

Introduces the student to the wide variety of psychological applications in business and industry. Topics covered include research methods, personnel psychology, performance evaluation, motivation and job satisfaction, organizational behavior, leadership and management, human factors, and consumer psychology. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2215***Cognitive Psychology***

3 Credit Hours

Students will be introduced to research, application, and theory in cognitive psychology. Topics will include perception, attention, learning, memory, language, judgment and decision making, and cognitive neuroscience. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2220***Educational Psychology***

3 Credit Hours

Students will be introduced to the application of learning principles and psychological theories relevant to teaching and learning. Topics will include motivation, behavioral management, and assessment. (3 lecture hours)

Prerequisite: PSYCH 1100 with a grade of C or better, or equivalent, or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2230 (S6 903)***Developmental Psychology: Childhood and Adolescence***

3 Credit Hours

Developmental study of the child from conception through adolescence with emphasis on the influence of genetic, physical, cognitive, emotional and social factors. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2233 (S6 904)***Developmental Psychology: Adolescence***

3 Credit Hours

The integration of theory and research as they apply to the basic concepts and themes in adolescent development. Includes discussion of the physical, emotional, social, familial, moral, educational and cultural aspects of adolescent development and behavior. (3 lecture hours)

Prerequisite: PSYCH 1100 or equivalent.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2235 (S6 905)***Developmental Psychology: Adulthood***

3 Credit Hours

Study of development of the normal adult from young through late adulthood concluding with the topics of death and dying. Includes the discussion of major theories of life span and adult development, as well as the development of self; cognitive, social and career development; physical health and aging; and coping, adaptation and mental health. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

PSYCH 2237 (S6 902)***Developmental Psychology: The Life Span***

3 Credit Hours

Study of the development of humans from conception to death, with an emphasis on the scientific analysis of developmental patterns across the life span. Reviews research on major physical, cognitive, social, and emotional changes that occur during development. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2240***Social Psychology***

3 Credit Hours

A systematic introduction to theory and research on the ways social factors influence individual and group behavior. Examines research methods, attitudes, social perception, conformity, leadership, group dynamics and the establishment of norms, emphasizing their effects on the individual. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

PSYCH 2255***Personality***

3 Credit Hours

The scientific study of the origins of individual differences in thought, emotion and behavior. Topics covered include basic theoretical perspectives, assessment techniques, research methodologies, and current topics in personality research. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2260 (PSY 905)***Abnormal Psychology***

3 Credit Hours

An introduction to the theoretical approaches and empirical research in psychology used to define, assess, categorize, prevent and treat psychological disorders. (3 lecture hours)

Prerequisite: PSYCH 1100.

PSYCH 2270***Health Psychology***

3 Credit Hours

Examines theory and research on the reciprocal relationship between physical health, behavior and cognitive processes. Biopsychosocial factors related to the maintenance of health and the prevention and treatment of illness are explored. Attention is devoted to the impact of personal lifestyle on physical health, the interpersonal processes involved in the provision of medical care, and the emerging role of behavioral medicine in modern care. (3 lecture hours)

Prerequisite: PSYCH 1100.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2280 (M1 902)***Statistics/Social & Behavioral Sciences***

3 Credit Hours

Students will focus on mathematical reasoning and problem solving through the application of statistical methods in the analysis of quantitative data in the social and behavioral sciences. Students will also explore frequently used statistical methods and learn the use of computer applications in the analysis of quantitative data. Credit cannot be given for both for Psychology 2280 and Sociology 2205. (2 lecture hours, 2 lab hours)

Prerequisite: MATH 0465 or MATH 0482 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or qualifying ACT/SAT math score and at least one course in the social/behavioral sciences.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

PSYCH 2285***Behavioral Research Methods***

4 Credit Hours

An introduction to descriptive and experimental designs used in the study of behavior. Course content emphasizes methodology, procedures, ethics in research, psychological measurement, basic data analysis, and research report writing. (3 lecture hours, 2 lab hours)

Prerequisite: At least one course in social and behavioral sciences.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2800***Special Project***

1-3 Credit Hours

Special Project – Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.).

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2820***Advanced Selected Topics I***

1-3 Credit Hours

Advanced Selected Topics I – Advanced exploration and analysis of selected Psychology topics with a specific theme indicated by course title listed in the college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Internship (Career and Technical Education) – Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Internship - Advanced (Career and Technical Education) – Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2870***Internship (Transfer)***

1-4 Credit Hours

Internship (Transfer) – Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

PSYCH 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Internship - Advanced (Transfer) – Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

Radiation Therapy (RATH)

RATH 2301***Principles and Practice of Radiation Therapy I***

4 Credit Hours

Provides an overview of cancer and the specialty of radiation therapy. The medical, biological and pathological aspects as well as the physical and technical aspects are discussed. Roles and responsibilities of the radiation therapist, the treatment prescription, the documentation of treatment parameters and delivery are also discussed. (4 lecture hours)

Prerequisite: Admission to the Radiation Therapy program or consent of instructor.

RATH 2302***Principles and Practice of Radiation Therapy II***

4 Credit Hours

Examines the management of neoplastic disease from a multidisciplinary perspective. The epidemiology, etiology, detection, diagnosis, patient condition, treatment and prognosis of neoplastic disease are presented, discussed and evaluated in relationship to histology, anatomical site and patterns of spread. The radiation therapist's responsibility in the management of neoplastic disease is examined and linked to the skills required to analyze complex issues and make informed decisions. (4 lecture hours)

Prerequisite: Admission to Radiation Therapy program and RATH 2301, RATH 2321, and RATH 2331, all with a grade of C or better, or equivalent or consent of instructor.

RATH 2303***Principles and Practice of Radiation Therapy III***

4 Credit Hours

Establishes factors that influence and govern clinical planning of patient treatment. Encompassed are isodose descriptions, patient contouring, radiobiologic considerations, dosimetric calculations, compensation and clinical application of treatment beams. Optimal treatment planning is emphasized along with particle beams. Stereotactic and emerging technologies are presented. (4 lecture hours)

Prerequisite: Admission to the Radiation Therapy program and RATH 2302, RATH 2311, RATH 2322, and RATH 2332, all with a grade of C or better or equivalent or consent of instructor.

RATH 2310***Radiation Therapy Physics***

3 Credit Hours

Establishes a basic knowledge of physics necessary to develop an understanding of radiation used in the clinical setting, and to develop a knowledge base in factors that govern and influence the production and recording of radiographic images for patient simulation, treatment planning and treatment verification in radiation oncology. Fundamental physical units, measurements, types of radiation, fundamentals of X-ray generating equipment, X-ray production, radiation oncology imaging equipment and related devices are emphasized. (3 lecture hours)

Prerequisite: Admission to Radiation Therapy program or consent of instructor.

RATH 2311***Radiation Biology and Protection***

4 Credit Hours

Presents basic concepts and principles of radiation biology and radiation safety as they relate to radiation therapy. The interactions of radiation with cells, tissues and the body as a whole and resultant biophysical events are presented. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are also incorporated. (4 lecture hours)

Prerequisite: Admission to Radiation Therapy program and RATH 2301, RATH 2310, RATH 2321, and RATH 2331, all with a grade of C or better or equivalent or consent of instructor.

RATH 2312***Quality Management in Radiation Therapy***

3 Credit Hours

Focuses on the evolution of quality management (QM) programs and continuing quality improvements in radiation oncology. Topics include the need for quality assurance (QA) checks; QA of the clinical aspects and chart checks; film checks; the various types of evaluations and tests performed on simulators, megavoltage therapy equipment and therapy planning units; the role of radiation therapists in QM programs; legal and regulatory implications for maintaining appropriate QM guidelines as well as the role of computers and information systems within the radiation oncology department. (3 lecture hours)

Prerequisite: Admission to Radiation Therapy program and ARRT certification; RATH 2302, RATH 2311, RATH 2322, and RATH 2332, all with a grade of C or better, or equivalent.

RATH 2321***Cross-Sectional Anatomy***

2 Credit Hours

Basics of cross-sectional anatomy related to lesion localization in Radiation Therapy, normal sectional anatomy as shown in diagrams and radiographic, sonographic, computerized tomography (CT), nuclear medicine, and magnetic resonance (MR) images. (2 lecture hours)

Prerequisite: Admission to Radiation Therapy program or consent of instructor.

RATH 2322***Pathophysiology for Radiation Therapy***

3 Credit Hours

Introduces basic disease concepts, theories of disease causation, and system-by-system pathophysiologic disorders most frequently encountered in clinical practice. The processes involved in the development and classification of both benign and malignant tumors and site-specific information on malignant tumors are addressed. (3 lecture hours)

Prerequisite: Admission to Radiation Therapy program; and RATH 2301 and RATH 2310, both with a grade of C or better, or equivalent; or RATH 2321 and RATH 2331, both with a grade of C or better, or equivalent; or consent of instructor.

RATH 2323***Operational Issues in Radiation Therapy***

3 Credit Hours

Focuses on various radiation therapy operational issues. Addresses concepts of team practice, patient-entered clinical practice and professional development. The interrelatedness of standards of care, law, ethical standards and competence will also be examined. (3 lecture hours)

Prerequisite: Admission to Radiation Therapy program and ARRT certification; RATH 2302, RATH 2311, RATH 2322, and RATH 2332, all with a grade of C or better, or equivalent.

RATH 2331***Clinical Practice I***

3 Credit Hours

Provides sequential development, application, analysis, integration, synthesis, and evaluation of concepts and theories in radiation therapy. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. (24 clinical hours)

Prerequisite: Admission to Radiation Therapy program or consent of instructor.

RATH 2332***Clinical Practice II***

3 Credit Hours

Expands the skills learned in RATH 2331. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice, and professional development shall be discussed, examined, and evaluated. (24 clinical hours)

Prerequisite: Admission to Radiation Therapy program; RATH 2301 and RATH 2331, both with a grade of C or better, or equivalent; or consent of instructor.

RATH 2333***Clinical Practice III***

3 Credit Hours

Advanced integration of skills learned in RATH 2331 and RATH 2332. Through structured sequential assignments in clinical facilities, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. (24 clinical hours)

Prerequisite: Admission to the Radiation Therapy program; and RATH 2302 and RATH 2332, both with a grade of C or better or equivalent; or consent of instructor.

Real Estate (REALE)

REALE 1130

Real Estate Broker Pre-License Topics

5 Credit Hours

Introduction to real estate topics including license law, real property, agency, seller and buyer relationships, state and federal laws, marketing and advertising, market analysis and appraisal, financing, contracts, employment agreements, and career paths. A required course to take the Illinois Real Estate Broker License Examination. (5 lecture hours)

REALE 1131

Real Estate Broker Pre-License Applied Real Estate Principles

1 Credit Hour

Application of real estate broker pre-license topics to the practice of real estate brokerage. Includes situational and case studies, role playing, and demonstration of real estate activities. A required course to take the Illinois Real Estate Broker License Examination. (1 lecture hour)

Prerequisite: REALE 1130 with a grade of C or better, or equivalent or concurrent enrollment in REALE 1130.

REALE 1134

Real Estate Broker Post-License Topics

1 Credit Hour

Study of real estate topics including license law, state and federal laws, agency and real estate transactions. A required course to maintain an Illinois Real Estate Broker License. (1 lecture hour)

Prerequisite: An Illinois Real Estate Broker License.

REALE 1135

Real Estate Broker Post-License Applied Real Estate Practices

1 Credit Hour

Application of real estate broker post-license topics to the practice of real estate brokerage. Includes situational and case studies, role playing, and demonstration of real estate activities. A required course to maintain an Illinois Real Estate Broker License. (1 lecture hour)

Prerequisite: REALE 1134 with a grade of C or better, or equivalent or concurrent enrollment in REALE 1134. Have an Illinois Real Estate Broker License.

REALE 1138

Real Estate Managing Broker Pre-License Topics

2 Credit Hours

Study of real estate topics including licensing, operations, escrow, and management. A required course to take the Illinois Real Estate Managing Broker License Examination. (2 lecture hours)

Prerequisite: An Illinois Real Estate Broker License.

REALE 1139

Real Estate Broker Pre-License Applied Management and Supervision

1 Credit Hour

Application of real estate managing broker pre-license topics to the practice of real estate brokerage. Includes situational and case studies, dispute resolution simulations, supervision situations, escrow, and discipline case studies. A required course to take the Illinois Real Estate Managing Broker License Examination. (1 lecture hour)

Prerequisite: REALE 1138 with a grade of C or better, or equivalent or concurrent enrollment in REALE 1138. Have an Illinois Real Estate Broker License.

Religious Studies (RELIG)

RELIG 1100 (H5 900)

Introduction to Religion

3 Credit Hours

Introduces the study of religion by examining the variety of interwoven elements found in religions throughout the world. These elements include the nature of the divine and ultimate reality, sacred history, sacred texts and languages, founders and heroes, religious ethics and rituals, religious uses of art, ideas of salvation, and more. Commonalities and differences among religions help to illuminate the phenomenon of religion in its various manifestations. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

RELIG 1110 (H5 901)

Introduction to the Bible: Old Testament

3 Credit Hours

Introduces the history and thought of the Old Testament (also known as the Hebrew Bible). Topics include the place of the Old Testament in its ancient Near Eastern context; the books and genres of the Old Testament; the composition and canonization of the Old Testament; and the doctrines, ethics, and rituals of the Old Testament. Students will be introduced to both modern scholarly methods of interpreting the Old Testament and traditional Jewish and Christian interpretations of the text. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 1120 (H5 901)

Introduction to the Bible: New Testament

3 Credit Hours

Introduces the history and thought of the New Testament. Topics include the relationship between the Old Testament and the New Testament; the identity, mission, and thought of Jesus; the mission and thought of Paul; and the composition and canonization of the New Testament. Students will be introduced to both modern scholarly methods of interpreting the New Testament and traditional Christian interpretations of the text. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 1150 (H5 904N)

World Religions

3 Credit Hours

An introduction to the histories, beliefs, practices, and sacred texts of the major world religions. These include Judaism, Christianity, Islam, Hinduism, Jainism, Buddhism, Sikhism, Daoism, and Confucianism. Credit cannot be given for both RELIG 1150 and PHILO 1150. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

RELIG 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Course requires Reading Placement Test Score - Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 2155 (H4 903N)***Asian Thought***

3 Credit Hours

Introductory overview of selected philosophical and religious systems of Asia. Emphasizes the conceptual and intellectual foundations of a variety of Asian traditions, and includes consideration of the historical and cultural contexts that shape them. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One. Recommended: PHILO 1100 and/or RELIG 1100.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

RELIG 2160 (H5 901)***Judaism, Christianity and Islam***

3 Credit Hours

This course presents an overview of the historical development of Judaism, Christianity and Islam, as well as roles of scripture, ritual, theology, and ethics. These religions' social relevance and their current inter-relations are also considered. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One. Recommended: RELIG 1100 or equivalent.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

RELIG 2170***Women and Religion***

3 Credit Hours

An introduction to the complex, changing position of women in major world religions including Judaism, Christianity, Islam, Hinduism, and Buddhism. The approach will be both historical and contemporary, with significant emphasis on the United States today. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 2230***Introduction to Islam***

3 Credit Hours

An introduction to both the Islamic religion and Islamic civilization. Explores the life of Muhammad, early Islamic history, the Qur'an, the hadith, Islamic law, Sunnism, Shi'ism, and Sufism. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 2280***Search for the Historical Jesus***

3 Credit Hours

Seminar-style course focusing on the analysis of primary sources of historical information about Jesus. Will also focus on the research methodologies devised by scholars to reconstruct the life of Jesus. Students will evaluate both Christian and non-Christian sources describing significant events in the life of Jesus. (3 lecture hours)

RELIG 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 2870**Internship (Transfer)**

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RELIG 2871**Internship - Advanced (Transfer)**

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Respiratory Care (RESP)

RESP 1101**Basic Respiratory Care**

3 Credit Hours

Students will be introduced to the initiation and maintenance of common respiratory care procedures and equipment to include oxygen and aerosol administration, arterial blood gas procedure, pharmacological administration, lung expansion and airway clearance techniques. (2 lecture hours, 3 lab hours)

Prerequisite: Admission to the respiratory care program; concurrent enrollment in RESP 1105, RESP 1120, and RESP 1121; or consent of instructor.

RESP 1102**Intermediate Respiratory Care**

3 Credit Hours

Students will continue to build upon skills learned in the prior semester with emphasis on cardiac and pulmonary pathology, positive pressure breathing, airway care, and introductory mechanical ventilation. (2 lecture hours, 3 lab hours)

Prerequisite: RESP 1101, RESP 1105, RESP 1120, and RESP 1121, all with a grade of C or better, or equivalent; and concurrent enrollment in RESP 1111; or consent of instructor.

RESP 1103**Advanced Respiratory Care**

3 Credit Hours

Students will be introduced to application and management of life-support systems in the emergency and intensive care units. Topics include initiation, management and liberation of adult volume and pressure ventilation. (2 lecture hours, 3 lab hours)

Prerequisite: RESP 1102 and RESP 1111, both with a grade of C or better, or equivalent; and concurrent enrollment in RESP 1113; or consent of instructor.

RESP 1105**Respiratory Assessment and Procedures**

4 Credit Hours

Students will be introduced to respiratory care patient assessment. Topics include gathering and evaluating patient history and clinical information as well as recommendations for respiratory care plans. Other topics include universal precautions, equipment safety for gas cylinders and metering devices, workplace laws, patient charting and communication, cardiopulmonary resuscitation (CPR) and concepts in transcultural patient care. (3 lecture hours, 3 lab hours)

Prerequisite: Admission to the Respiratory Care Program; and concurrent enrollment in RESP 1101, RESP 1120, and RESP 1121; or consent of instructor.

RESP 1111**Clinical Practice I**

2 Credit Hours

Students will be introduced to the clinical practice of skills learned in the prior semester through assignments at clinical facilities. The application, quality, and independence of skills in addition to professional communication will be evaluated. (16 clinical hours)

Prerequisite: RESP 1101, RESP 1105, RESP 1120, and RESP 1121, all with a grade of C or better; and concurrent enrollment in RESP 1102; or consent of instructor.

RESP 1113**Intensive Respiratory Care Clinical Practice**

1 Credit Hour

Students are introduced to the clinical practice of intensive care procedures within surgical, cardiac, and respiratory intensive care units as well as the emergency department. Students will apply knowledge of ventilator initiation, adjustments, and liberation through assignments at clinical facilities. The application, quality, and independence of skills and as well as professional communication will be evaluated. (10 clinical hours)

Prerequisite: RESP 1102 and RESP 1111, both with a grade of C or better; and concurrent enrollment in RESP 1103; or consent of instructor.

RESP 1120**Applied Cardiopulmonary Anatomy and Physiology**

4 Credit Hours

Students will be introduced to cardiopulmonary anatomy and physiology as related to respiratory care procedures and clinical practice. Major emphasis is placed on the pulmonary and circulatory systems, ventilation and perfusion, central nervous system control, pulmonary function, and hemodynamic measurements. (3 lecture hours, 2 lab hours)

Prerequisite: Admission to the Respiratory Care Program; and concurrent enrollment in RESP 1101, RESP 1105, and RESP 1121; or consent of instructor.

RESP 1121***Science for Respiratory Care***

5 Credit Hours

Students will be introduced to science concepts related to respiratory care procedures. Scientific concepts will include metabolic and respiratory acid-base balance, respiratory and cardiac formulas, blood gas data as applied to patient care, case study interpretation, and assessment. (5 lecture hours)

Prerequisite: Admission to Respiratory Care Program; and concurrent enrollment in RESP 1101, RESP 1105, and RESP 1120; or consent of instructor.

RESP 2201***Advanced Life Support, Monitoring, and Trends***

4 Credit Hours

Students will expand concepts in mechanical ventilation management and procedures in the critical care setting. Topics will cover new trends in ventilator modes, advanced ventilator graphics, hemodynamic assessment and treatment, metabolic cart, and polysomnography results. Patient management through patient scenarios will be presented. (4 lecture hours)

Prerequisite: RESP 2205, RESP 2206, and RESP 2280, all with a grade of C or better or equivalent; and concurrent enrollment in RESP 2250, RESP 2207, and RESP 2202; or consent of instructor.

RESP 2202***Pulmonary Function Testing***

3 Credit Hours

Students will be introduced to diagnostic tests performed in the pulmonary function lab. Topics include forced and slow vital capacity measurements, maximum voluntary ventilation, before and after bronchodilator studies, carbon monoxide diffusion, nitrogen washout, exercise testing, and other pulmonary diagnostic tests. (2 lecture hours, 2 lab hours)

Prerequisite: RESP 2205, RESP 2206, and RESP 2280, all with a grade of C or better, or equivalent; and concurrent enrollment in RESP 2201, RESP 2207, and RESP 2250; or consent of instructor.

RESP 2205***Neonatal and Pediatric Intensive Respiratory Care***

3 Credit Hours

Students will be introduced to neonatal and pediatric respiratory intensive care principles. Topics include fetal circulation, congenital cardiac defects, maternal and patient assessment, airway care, ventilator initiation and management, and physiologic monitoring as applied to infants and children in the emergency and specialty intensive care units. Students will complete Neonatal Resuscitation Program certification. (2 lecture hours, 2 lab hours)

Prerequisite: RESP 1103 and RESP 1113, both with a grade of C or better, or equivalent; and concurrent enrollment in RESP 2280 and RESP 2206; or consent of instructor.

RESP 2206***Advanced Intensive Respiratory Care - Adult***

2 Credit Hours

Students will continue to build on their clinical practice in adult emergency and intensive care units. Procedures will include clinical data evaluation, mechanical ventilation, hemodynamic monitoring, airway management, chest X-ray interpretation, pharmacologic administration, and advanced cardiac life-support (ACLS). (16 clinical hours)

Prerequisite: RESP 1103 and RESP 1113, both with a grade of C or better, or equivalent; and concurrent enrollment in RESP 2205 and RESP 2280; or consent of instructor.

RESP 2207***Advanced Intensive Respiratory Care - Neonatal-Pediatric***

1 Credit Hour

Students will be introduced to advanced clinical practice in emergency, neonatal, and pediatric intensive care units through assignments at clinical facilities. Other rotations include long term care, pulmonary rehabilitation, physician offices, and home health. (10 clinical hours)

Prerequisite: RESP 2280 and RESP 2206, both with a grade of C or better, or equivalent; and concurrent enrollment in RESP 2201, RESP 2202, and RESP 2250; or consent of instructor.

RESP 2250***Respiratory Care Board Review***

4 Credit Hours

Students will prepare for both Therapist Multiple Choice and Clinical Simulation board exams from the National Board of Respiratory Care through proctored testing. (4 lecture hours)

Prerequisite: RESP 2280, RESP 2205, and RESP 2206, all with a grade of C or better, or equivalent; and concurrent enrollment in RESP 2201, RESP 2202, and RESP 2207; or consent of instructor.

RESP 2280***Advanced Clinical Assessment and Protocol***

4 Credit Hours

Students will learn advanced integration skills for clinical assessment of respiratory care patients in the adult intensive care setting. Topics include airway management, chest X-ray interpretation, pharmacologic agents, initiation of evidence based protocols, and best clinical practice guidelines. Students will complete Advanced Cardiovascular Life Support (ACLS) and Pediatric Advanced Life Support (PALS) certification. (3 lecture hours, 2 lab hours)

Prerequisite: RESP 1103 and RESP 1113, both with a grade of C or better, or equivalent; and concurrent enrollment in RESP 2205 and RESP 2206; or consent of instructor.

Russian (RUSSI)

RUSSI 1101***Elementary Russian I***

4 Credit Hours

Develops the ability to speak, understand, read and write Russian in a cultural context. For the beginning student. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

RUSSI 1102***Elementary Russian II***

4 Credit Hours

Continues to develop the ability to speak, understand, read and write Russian in a cultural context. For students who have successfully completed RUSSI 1101 or equivalent or one year of high school Russian. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

RUSSI 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RUSSI 2201***Intermediate Russian I***

4 Credit Hours

Develops the ability to read and discuss modern texts: conversation, composition, grammar, and a brief introduction to Russian literary history. For students who have successfully completed RUSSI 1102 or equivalent or two years of high school Russian. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

RUSSI 2202 (H1 900)***Intermediate Russian II***

4 Credit Hours

Further develops the ability to read and discuss modern texts: conversation, composition, grammar, and an introduction to Russian literary history. For students who have successfully completed RUSSI 2201 or equivalent or three years of high school Russian. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

RUSSI 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RUSSI 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RUSSI 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

RUSSI 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Sign Language (SIGN)

SIGN 1101

American Sign Language I

3 Credit Hours

Students are provided an introduction to American Sign Language. Sign comprehension, production, grammar, non-verbal communication techniques, and applicable vocabulary will be emphasized throughout the course. Deaf Culture and fingerspelling will also be introduced. American Sign Language I is designed for students with no experience with American Sign Language. (3 lecture hours)

SIGN 1102

American Sign Language II

3 Credit Hours

ASL II builds on vocabulary and further develops language comprehension and grammatical structure, acquired from ASL I, continuing with language comprehension and production skills at a complex level. Deaf Culture will be incorporated into language use. (3 lecture hours)

Prerequisite: SIGN 1101 with a grade of C or better, or equivalent or consent of instructor.

SIGN 1103

Fingerspelling and Numbers in Asl/ Interpreting

3 Credit Hours

An introduction to a manual depiction of the alphabet and numbering system in American Sign Language. Emphasis is on development of hand shape, basic word patterns, rhythm, and fluidity. Additional focus is placed on fingerspelled loan signs and the ASL numbering system. (3 lecture hours)

Prerequisite: SIGN 1101 with a grade of C or better, or equivalent or consent of instructor.

SIGN 1104

Cultural Perspective of the Deaf Community

3 Credit Hours

Introduction to the Deaf community from a cultural perspective. Discussions include advancement of the Deaf community in terms of culture, arts, language, self-image, and literature. (3 lecture hours)

SIGN 2101

American Sign Language III

3 Credit Hours

Develops proficiency in the structure of ASL grammar, fingerspelling, numbering systems, and visual-gestural communication. Discussions will include expressive and receptive skills that are necessary for complex dialogue and storytelling. Students are required to attend Deaf events and develop contacts within the Deaf community. (3 lecture hours)

Prerequisite: SIGN 1102 and SIGN 1103, both with a grade of C or better, or equivalent or consent of instructor.

SIGN 2102

Linguistics and Grammatical Aspects of American Sign Language

3 Credit Hours

Students will explore syntax, morphology, phonology, and semantics of American Sign Language (ASL). This class is beneficial for students who want to become an Interpreter or work within the Deaf community. (3 lecture hours)

Prerequisite: SIGN 2101 with a grade of C or better, or equivalent or consent of instructor.

SIGN 2103

American Sign Language IV

3 Credit Hours

Follows ASL III. Students will examine the structure of American Sign Language (ASL) grammar and complex conversational dynamics. Fingerspelling, numbers, and visual-gestural aspects will be further explored. (3 lecture hours)

Prerequisite: SIGN 2102 with a grade of C or better, or equivalent or concurrent enrollment in SIGN 2102, or consent of instructor.

Sociology (SOCIO)

SOCIO 1100 (S7 900)

Introduction to Sociology

3 Credit Hours

An introduction to the concepts and theories necessary for a scientific understanding of our social world. Topics include sociological research, culture and socialization, social deviance, stratification and inequality (social class, race/ethnicity, and sex/gender), and social institutions (family, education, religion, and the economy). (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SOCIO 1120 (S7 904D)

Sociology of Sex, Gender and Power

3 Credit Hours

Examines the difference between behavior based on biology and behavior based on what society says is appropriate in order to be masculine or feminine. Examines the question of what forces in society are most influential in determining the place of men and women with special emphasis on power. Examines how this influence works through the process of socialization and core social institutions, including marriage and family, education, religion, the economy and politics. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SOCIO 1205

Introduction to Data Science

3 Credit Hours

Students are introduced to a beginner level of the concepts related to data science including data collection, data wrangling, exploratory data analysis (EDA), data visualization, and data mining. Introduces the techniques of wrangling, EDA, visualization, and mining through the use of specialized software. (2 lecture hours, 2 lab hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 1800***Special Project***

1-4 Credit Hours

Social science courses integrate two or more disciplines in the social and behavioral sciences. Special project social science courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected sociology topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2200***Introduction to Research Methods***

3 Credit Hours

Introduces students to the social science research process and methods from theoretical, applied, and ethical points of view. Acquaints students with qualitative, quantitative, and mixed methods as well as procedures used to measure human behavior, gather and analyze data, and report findings. (3 lecture hours)

Prerequisite: At least one course in the social and behavioral sciences. Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2205 (M1 902)***Statistics for the Social and Behavioral Sciences***

3 Credit Hours

Students will focus on mathematical reasoning and problem solving through the application of statistical methods in the analysis of quantitative data in the social and behavioral sciences. Students will also explore frequently used statistical methods and learn the use of computer applications in the analysis of quantitative data. Credit cannot be given for both for PSYCH 2280 and SOCIO 2205. (2 lecture hours, 2 lab hours)

Prerequisite: MATH 0465 or MATH 0482 (or college equivalent) with a grade of C or better or qualifying score on the mathematics placement test or qualifying ACT or SAT math sub-score and at least one course in the social/behavioral sciences.

Course types: General Education: Mathematics (A.A.S., A.G.S.)

SOCIO 2210 (S7 901)***Social Problems***

3 Credit Hours

Comparatively examines the linkages among social structures, culture and human experience in the context of the globalization process. Students examine a variety of topics, which may include the unequal distribution of power and wealth; issues of sex, gender and social class; hunger; the role of multinational corporations; war and international conflict; oppression of various kinds; crime; poverty; the media; other social institutions; resource/environmental use and depletion, and population. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SOCIO 2215 (S7 903D)***Race and Racism in America***

3 Credit Hours

Provides sociological perspectives to understand the invention of race as a categorization of people. Examines how race and ethnicity influence people's daily experiences. Analyzes differential power between groups and the social structures that are used to maintain these power differences. Focuses on various dimensions of discrimination and prejudice, including an analysis of inequality and its origins, and conditions under which inequality occurs, persists, and changes. Identifies potential solutions to racial inequality. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SOCIO 2220 (S7 902)***Sexual Relationships, Marriage & Family***

3 Credit Hours

A cross-societal focus on sex-roles, dating, mate selection and sexuality. Traditional and emerging marriage, family and child-rearing patterns are explored from multi-national and global perspectives. Marital dynamics, including expressiveness, marital power, conflict, family violence, divorce and the later years of marriage are featured. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SOCIO 2235***Animals and Society***

3 Credit Hours

Explores the position of animals in society from the sociological perspective. Students will examine how society is structured through interactions with non-human animals. Opportunities for field trips may be offered throughout the semester. (3 lecture hours)

Prerequisite: Course requires reading placement category one or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2251***Health & Illness in Contemporary Society***

3 Credit Hours

This course examines illness as a phenomenon, which both influences and is influenced by society. As such, it can be viewed as a form of social deviance, which patients, healers and the larger society attempt to reduce. Perspectives provided by theory and research in the sociology of deviance, occupations and complex organizations are employed to gain an understanding of health and illness behavior, health practitioners and health institutions. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2252***Social Gerontology: Aging and Society***

3 Credit Hours

The course follows a multidisciplinary approach. It includes social, psychological and biological aspects of the aging process. This course examines the cultural, social and global views of aging. Topics include social institutions of family, healthcare, economy, politics and public policy. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2253***Dying, Death and Bereavement***

3 Credit Hours

Examines the social meanings of dying and death, as well as grief and bereavement processes. Topics include the funeral, ethical issues, children and dying, hospice, suicide and bereavement history in America. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2290***Sociology of Communication & Media***

3 Credit Hours

Analyzes the effects of a variety of media on society, social interaction and communications. Examines the structure and organization of traditional (such as printed media, television or radio) and new (such as electronic and digital) media and social networking technologies (such as MySpace, Facebook or Second Life) as well as their cultural, political, economic and social impacts. Specific topics include the role of the media in shaping or creating social issues and influencing the public, the ways in which organizations, interest groups and social movements gain access and use diverse media to shape public discourse on a global scale. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SOCIO 2800***Special Project***

1-4 Credit Hours

Social science courses integrate two or more disciplines in the social and behavioral sciences. Advanced special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). This course may be taken four times for credit as long as different topics are selected.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2820***Advanced Selected Topics I***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college Class Schedule. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2821***Advanced Selected Topics II***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college Class Schedule. (2 lecture hours, 2 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2822***Advanced Selected Topics III***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (1 lecture hour, 4 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2823***Advanced Selected Topics IV***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (6 lab hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

SOCIO 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Social and Behavioral Sciences (A.A.S., A.G.S.)

Spanish (SPANI)

SPANI 1100***Civilization and Culture of Spain***

3 Credit Hours

Introduction in English to the culture, geography, history, economics, political institutions, psychology, literature, music, art and architecture of Spain. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SPANI 1101***Elementary Spanish I***

4 Credit Hours

Develops the ability to speak, understand, read and write Spanish in a cultural context. For the beginning student. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 1102***Elementary Spanish II***

4 Credit Hours

Continues the development of the ability to speak, understand, read, and write Spanish in a cultural context. For students who have successfully completed SPANI 1101 or equivalent or one year of high school Spanish. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 1105***Spanish Conversation I***

1 Credit Hour

Develops the student's ability to communicate in Spanish at the beginning level with a primary focus on speaking. Listening and reading comprehension will also be improved. With a special emphasis on conversational and presentation skills, students will discuss a variety of historical and contemporary cultural topics and current affairs in a global context. For students who have completed one semester of college-level Spanish. (1 lecture hour)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 1110***Latin American Culture & Civilization***

3 Credit Hours

Introduction to the culture, geography, history, economics, political institutions, sociology, literature, music, and arts of present-day Latin America. Conducted in English. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SPANI 1112***Spanish for Educators I***

3 Credit Hours

Develops basic conversational skills in Spanish to communicate effectively in educational settings. Emphasizes the ability to speak, understand, read, and write Spanish in cultural contexts. Role-plays and simulations will be used to prepare students to successfully engage with Spanish speakers in their schools and communities. For the beginning student. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SPANI 1113***Spanish for Educators II***

3 Credit Hours

Continues the development of basic conversational skills in Spanish to communicate effectively in educational settings. Continues to emphasize the ability to speak, understand, read, and write Spanish in cultural contexts. Role-plays and simulations will be used to prepare students to successfully engage with Spanish speakers in their schools and communities. For students who have successfully completed SPANI 1112 or equivalent, or one year of high school Spanish, or consent of instructor. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SPANI 1114***Spanish for Healthcare Professionals I***

3 Credit Hours

Develops the ability to speak, understand, read, and write in Spanish in healthcare settings. Emphasizes basic conversational skills in Spanish to communicate effectively in cultural contexts. Role-plays and simulations will be used to prepare students to engage successfully with Spanish speakers in diverse healthcare settings. For the beginning student. (3 lecture hours)

SPANI 1115***Spanish for Healthcare Professionals II***

3 Credit Hours

Continues to develop the ability to speak, understand, read, and write in Spanish in healthcare settings. Continues to emphasize basic conversational skills in Spanish to communicate effectively in cultural contexts. Role-plays and simulations will be used to prepare students to engage successfully with Spanish speakers in diverse healthcare settings. For students who have successfully completed SPANI 1114 or equivalent, or one year of high school Spanish, or consent of instructor. (3 lecture hours)

SPANI 1116***Spanish for Horticulture***

3 Credit Hours

Develops basic conversational skills to communicate effectively in the horticulture industry. Emphasizes the ability to speak, understand, read, and write Spanish for safe, effective, and productive workplace interactions in a cross-cultural context. Role-plays and simulations will be used to prepare students to successfully engage with Spanish speakers in the green industry. For the beginning student. Credit cannot be earned for both SPANI 1116 and HORT 1116. (3 lecture hours)

Course types: Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 1120***Civilization and Culture of Costa Rica***

3 Credit Hours

Introduction to the culture, history, geography, social and political institutions, environment, and arts of Costa Rica. Course is taught in English. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SPANI 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

SPANI 2201***Intermediate Spanish I***

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write Spanish in a cultural context. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed SPANI 1102 or equivalent or two years of high school Spanish. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 2202 (H1 900)***Intermediate Spanish II***

4 Credit Hours

Continues to develop the ability to speak, understand, read, and write Spanish in a cultural context. Includes reading and discussion of modern texts, conversation, composition, grammar review, and cultural activities. For students who have successfully completed SPANI 2201 or equivalent or three years of high school Spanish. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 2205***Spanish Conversation II***

1 Credit Hour

Develops the student's ability to communicate in Spanish at the intermediate level with a primary focus on speaking. Listening and reading comprehension will also be improved. With a special emphasis on conversational and presentation skills, students will discuss a variety of historical and contemporary cultural topics and current affairs in a global context. For students who have successfully completed SPANI 1102 or SPANI 1105 or equivalent. (1 lecture hour)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 2206 (H1 900)***Spanish for Heritage Speakers I***

4 Credit Hours

Develops understanding, speaking, reading, and writing skills in Spanish for students who comprehend spoken Spanish and may have some degree of skill in speaking, reading, and writing ability. Focuses on reading development, orthography, lexical expansion, formal grammar, and facility in writing and composition. Fosters appreciation of Hispanic cultural-linguistic heritage. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 2208 (H1 900)***Spanish for Heritage Speakers II***

4 Credit Hours

Continues to develop understanding, speaking, reading, and writing skills in Spanish for students who comprehend spoken Spanish and may have same degree of speaking, reading, and writing ability or have successfully completed SPANI 2206 or equivalent. Focuses on reading development, orthography, lexical expansion, formal grammar, facility in writing and composition. Fosters appreciation of Hispanic cultural-linguistic heritage. (4 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 2251 (H1 900)***Conversation and Composition I***

3 Credit Hours

Develops students' listening and comprehension, speaking, reading, and writing skills and expands knowledge of the culture and civilization of Spanish-speaking countries. For students who have successfully completed SPANI 2202 or equivalent, or four years of high school Spanish. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 2252 (H1 900)***Conversation and Composition II***

3 Credit Hours

Develops students' listening comprehension, speaking, reading, and writing skills and expands knowledge of the culture and civilization of Spanish-speaking countries. For students who have successfully completed SPANI 2251 or equivalent or five years of high school Spanish. (3 lecture hours)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 2255***Spanish Conversation III***

1 Credit Hour

Develop the student's ability to communicate in Spanish at the intermediate to advanced level with a primary focus on speaking. Listening and reading comprehension will also be improved. With a special emphasis on conversational and presentation skills, students will discuss a variety of historical and contemporary cultural topics and current affairs in a global context. For students who have successfully completed SPANI 2202 or SPANI 2205 or equivalent. (1 lecture hour)

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.), Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.)

SPANI 2256***Spanish for Careers I***

3 Credit Hours

Provides students with an introduction to technical vocabulary and communicative skills as they relate to the dynamics of the Spanish-speaking professional world and various bilingual workplace settings in the United States. Focus is on oral communication and vocabulary that will prepare students to understand, follow, and discuss essential operations related to specific career areas. Emphasizes comprehension of cultural nuances in the Spanish-speaking workplace. Recommended for students who have successfully completed SPANI 2208 Heritage Speakers II; or SPANI 2252 Conversation and Composition II, or equivalent, or four years of high school Spanish, or consent of instructor. Students will research an area of career interest in preparation for the capstone project in SPANI 2257. (3 lecture hours)

SPANI 2257***Spanish for Careers II***

3 Credit Hours

Students continue to develop technical vocabulary and communicative skills as they relate to the dynamics of the Spanish-speaking professional world and various bilingual workplace settings in the United States. Focus is on oral communication and vocabulary that will prepare students to understand, follow, and discuss essential operations related to specific career areas. Emphasizes comprehension of cultural nuances in the Spanish-speaking workplace. Recommended for students who have successfully completed SPANI 2256 or equivalent, or five years of high school Spanish, or consent of instructor. Course includes an on-site job shadow experience. (3 lecture hours)

SPANI 2800***Special Project***

1-4 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline, while building on academic knowledge and skills acquired in introductory-level classes. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

SPANI 2820***Advanced Selected Topics***

1-4 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor. This course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

SPANI 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

SPANI 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

SPANI 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

SPANI 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Speech Communication (SPEEC)

SPEEC 0495***Preparation for College Speech for Non-Native Speakers***

3 Credit Hours

This course is designed primarily to prepare students, whose first language is not English, for college-level speech courses. Introductory speaking exercises and speeches are included in the course work. This course is intended for students who are high school graduates and whose spoken English is most likely comprehensible to native speakers. May be repeated up to nine total credit hours. (3 lecture hours)

Prerequisite: ESL 0958 or equivalent, or consent of instructor recommended.

SPEEC 1100 (C2 900)***Fundamentals of Speech Communication***

3 Credit Hours

Examines basic concepts of the oral communication process. The class includes communication theory as well as speech preparation and delivery. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Oral Communication (A.A.S., A.G.S.)

SPEEC 1110***Oral Interpretation***

3 Credit Hours

Basic techniques of the oral performance of literature with emphasis on content analysis and performance. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

SPEEC 1120 (MC 902)***Small-Group Communication***

3 Credit Hours

An introduction to the theory and practice of small group communication. Emphasis is placed on social norms, the nature and types of groups, and leadership development. Students are expected to demonstrate both practical and theoretical understanding of problem-solving, decision-making, and conflict management. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Oral Communication (A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SPEEC 1130***Persuasion***

3 Credit Hours

Application of motivational principles to the preparation and presentation of persuasive messages. Includes analysis of and adaptation to audiences and occasions, analysis of persuasive messages, analysis of obstacles to persuasion and the means of overcoming them. (3 lecture hours)

SPEEC 1140 (MC 913)***Public Relations***

3 Credit Hours

This course is designed to introduce students to the public relations field. Covers topics from the nature of the work done by public relations practitioners to the description and use of the tools involved. Also, the various functions of public relations are examined including the overall process of research, planning and decision making, action and communication, and evaluation. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

SPEEC 1150***Introduction to Business Communication***

3 Credit Hours

This course is designed to help students understand communication behaviors and concepts in order to develop effective communication skills in the business environment. It covers topics related to communication between employees and their supervisors, communication within work groups, and public communication. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Oral Communication (A.A.S., A.G.S.)

SPEEC 1160 (MC 901)***Interpersonal Communication***

3 Credit Hours

An introduction to the basic theories and concepts relevant to face to face interaction. Emphasis is placed on the role of communication in the creation, maintenance, and termination of social, romantic, familial, and professional relationships. (3 lecture hours)

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

SPEEC 1180***Sports Communication***

3 Credit Hours

Introduction to Sports Communication and research in contemporary cultures. Theoretical frameworks currently used in sports communication research, both historically and currently, will be discussed, and students are expected to apply theory to Sports Communication topic areas. (3 lecture hours)

SPEEC 1190***Applied Forensics***

1 Credit Hour

Participation in forensics program. Application of public speaking, oral interpretation and debate skills to competitive situations. This course may be taken four three times for credit. (2 lab hours)

Prerequisite: Course requires Reading Placement Category One.

SPEEC 1800***Special Project***

3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: Course requires Reading Placement Category One.

SPEEC 1820***Selected Topics***

1-4 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college course schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Course requires Reading Placement Test Score-Category One.

SPEEC 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within Speech Communication to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required. Course requires Reading Placement Test Score-Category One.

SPEEC 2130***Advanced Public Speaking***

3 Credit Hours

An interactive course exploring persuasive and informative speech preparation and delivery. Students learn to use visual aids effectively, handle questions and answers, analyze communication events, and understand the media. (3 lecture hours)

Prerequisite: SPEEC 1100 or consent of instructor. Course requires Reading Placement Category One.

SPEEC 2160***Argumentation and Debate***

3 Credit Hours

Develops and improves argumentative and critical-thinking skills in communication settings. Topics include analysis of discourse, development of sound oral reasoning, proper methods of refutation, and the facilitation of argumentation in group situations. Through participation in various types of in-class debates and forums on current topics, students research topics, discover issues and formulate propositions as they apply to social and personal decision-making. (3 lecture hours)

Prerequisite: SPEEC 1100 or consent of instructor. Course requires Reading Placement Category One.

SPEEC 2190***Forensics Theory and Practice***

3 Credit Hours

Explores the pedagogy of competitive forensics (speech, debate and performance of literature). Topics include the history of forensics, event analysis and rule interpretation, topic invention, instruction techniques for each event, rehearsal and performance methodologies, and critical methodologies. Intended for the communications major, potential or current competitor, future judge and/or future coach. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

SPEEC 2200 (MC 904)***Intercultural Communication***

3 Credit Hours

Examines how culture influences the communication process. Investigates major theories of intercultural communication, the universal human processes that contribute to cultural differences, and the practical approaches to communicating more effectively with persons from other cultures. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Global/Multicultural Studies (A.A., A.S., A.A.S., A.G.S.), Human Relations (A.A., A.S., A.A.S., A.G.S.)

SPEEC 2210***Readers' Theater (Group Performance of Literature)***

3 Credit Hours

This interactive course offers techniques in the oral presentation of literature by groups of two or more. Covers writing, adapting, acting and directing skills, and the use of readers' theater in elementary schools, counseling seminars, religious services and traditional entertainment. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

SPEEC 2800***Special Project***

3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline, while building on academic knowledge and skills acquired in introductory-level classes. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one other Speech Communication course or consent of instructor. Course requires Reading Placement Category One.

SPEEC 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

SPEEC 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

SPEEC 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

SPEEC 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Speech-Language Pathology Assistant (SLPA)

SLPA 1101***Introduction to Communication Disorders***

4 Credit Hours

Students will be introduced to a survey of normal and disordered communication. Development and disorders of speech, language, cognition, and hearing across the age continuum will also be addressed according to etiology, clinical manifestations, and intervention. (4 lecture hours)

SLPA 1105***Phonetics and Phonology***

3 Credit Hours

Students will be presented with an overview of the sciences of phonetics and phonology including an exploration of the anatomy and physiology of the speech mechanism and the mechanics of speech sound production. Other topics will include an introduction to the International Phonetic Alphabet (IPA) and commonly used diacritics with an emphasis on transcription in clinical settings. (3 lecture hours)

Prerequisite: SLPA 1101 or concurrent enrollment in SLPA 1101 or consent of instructor.

SLPA 1106***Speech Disorders and Intervention Across the Lifespan I***

4 Credit Hours

Overview of the etiologies and characteristics of a variety of speech disorders across the lifespan with an emphasis on intervention strategies. Includes an exploration of motor speech disorders, tracheostomies, laryngectomies, organic and functional voice disorders, orofacial anomalies and fluency disorders. Includes a review of neuroanatomy and physiology as it pertains to motor speech disorders and anatomy and physiology of the speech mechanism. (4 lecture hours)

Prerequisite: Admission to program, SLPA 1101, and SLPA 1105, or consent of instructor.

SLPA 1107***Speech Disorders and Intervention Across the Lifespan II***

2 Credit Hours

Examination of the potential etiologies and characteristics of articulation and phonological disorders with an emphasis on intervention strategies. Explores sequence and timing of speech sound acquisition. Addresses differences between articulation and phonological disorders in terms of nature and treatment. Includes an introduction to oral motor exercises. (2 lecture hours)

Prerequisite: Admission to program, SLPA 1101, and SLPA 1105, or consent of instructor.

SLPA 1109***Language Development***

3 Credit Hours

Exploration of the components of language and theories of language development. Emphasis placed on the typical sequence and timing of acquisition of language skills from infancy to adolescence. Includes typical changes in language during various stages of adulthood. Addresses issues of dialects and bilingualism. Explores the impact of environment and play on language development and the use of developmentally appropriate toys to encourage language development. (3 lecture hours)

Prerequisite: Admission to program and SLPA 1101 or consent of instructor.

SLPA 1110***Language Disorders and Intervention Across the Lifespan***

4 Credit Hours

Examination of the potential etiologies and characteristics of language disorders across the lifespan with an emphasis on intervention strategies. Addresses delayed/disordered language development in the pediatric population (infancy through adolescence) as well as aphasia, right hemisphere syndrome, traumatic brain injury, and dementia in the adult population. Includes exploration of language-based learning disabilities and language enrichment and literacy programs. Includes a review of neuroanatomy and physiology as it pertains to neurogenic language disorders. (4 lecture hours)

Prerequisite: Admission to program and SLPA 1109 or consent of instructor.

SLPA 1112***Introduction to Audiology***

2 Credit Hours

Overview of the study of audiology. Includes anatomy and physiology of the auditory system, review of audiological screening and assessment, aural pathologies and intervention strategies. Emphasis placed on impact of aural pathologies on communicative development and education as well as identification with hearing impaired/deaf culture. (2 lecture hours)

Prerequisite: Admission to program and SLPA 1101 or consent of instructor.

SLPA 1301***Sign Language I***

3 Credit Hours

Overview of the manual alphabet, numbers and basic sign vocabulary used in American Sign Language (ASL). Emphasis on development of both expressive and receptive signing skills. Explores Deaf history and culture and provides an understanding of the Deaf community. (3 lecture hours)

SLPA 1821***Selected Topics II***

1 Credit Hour

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour)

Prerequisite: Acceptance into program or coordinator approval is required.

SLPA 1822***Selected Topics III***

2 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college Class Schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

Prerequisite: Acceptance into program or coordinator approval is required.

SLPA 1840***Independent Study - Individualized***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Admission to program and consent of instructor is required.

SLPA 2101***Clinical Methods and Documentation***

4 Credit Hours

Exploration of the components of treatment goals, behavior modification, data collection and documentation. Includes instruction in planning a therapy session based upon a written therapy plan, with an emphasis on identifying appropriate and effective activities and materials to elicit target behaviors. Explores commonly utilized screening and assessment tools as appropriate in the SLPA scope of service. (4 lecture hours)

Prerequisite: Admission to program; and SLPA 1106, SLPA 1107, and SLPA 1110; or consent of instructor.

SLPA 2102***Professional Issues and the SLPA***

4 Credit Hours

Addresses a wide variety of issues pertinent to the professional life of the SLPA. Explores SLPA scope of service, licensure and registration, workplace skills, ethics, employment settings, team membership and conflict resolution, universal precautions, culturally sensitive practice, and the psychosocial impact of communication disorders. Includes resume writing and interviewing skills. (4 lecture hours)

Prerequisite: Admission to program; and SLPA 1106, SLPA 1107, and SLPA 1110; or consent of instructor.

SLPA 2104***Augmentative & Alternative Communication***

3 Credit Hours

Overview of augmentative and alternative communication (AAC) terminology, symbols, application of low versus high tech devices, and intervention. Includes overview of populations using AAC and issues of motor and sensory impairments. (3 lecture hours)

Prerequisite: Admission to program; and SLPA 1106, SLPA 1107, and SLPA 1110; or consent of instructor.

SLPA 2112***Clinical Practicum***

6 Credit Hours

Supervised clinical experience in two clinical placements, such as health care, clinic or school settings. Addresses development of clinical skills, including professionalism, implementation of prescribed therapy plans, data recording and documentation. Emphasis on developing competencies for ethical and effective Speech-Language Pathology Assistant practice. Requires attendance at assigned clinical sites three days per week. (24 clinical hours)

Prerequisite: Admission to program; and SLPA 2101 and SLPA 2102; or consent of instructor.

SLPA 2301***Sign Language II***

3 Credit Hours

Expansion of American Sign Language (ASL) skills learned in SLPA-1301. Emphasis on development of both expressive and receptive conversational skills. Development of syntax skills and enhancement of vocabulary. Addresses Deaf history, culture and community in greater depth. (3 lecture hours)

Prerequisite: SLPA 1301.

SLPA 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

SLPA 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Surgical First Assistant (CSFA)

CSFA 2501***Surgical First Assistant Principles I***

9 Credit Hours

Students will explore surgical first assisting fundamentals. Topics include surgical first assistant role and responsibilities, perioperative microbiology, pharmacology, electrolytes, fluid & shock, anesthesia principles, surgical site infections, hematological principles, and all-hazards preparation. Concepts of general and obstetric & gynecologic surgeries will also be included. (9 lecture hours)

Prerequisite: Admission to the Surgical First Assistant Program is required.

CSFA 2502***Surgical Laboratory Practicum***

6 Credit Hours

Students will be introduced to the perioperative scope of practice of surgical first assistant. Learning competencies will be introduced and tested. Competencies include demonstration of incision types, step-by-step elements of the surgical procedures, concepts of minimally invasive surgical procedures, wound closure, drains, catheter insertion, tourniquet application, dressing application, knot tying, and advanced suturing for a variety of injuries, surgeries, and incisions. (3 lecture hours, 4 lab hours, 8 clinical hours)

Prerequisite: Program admission is required.

CSFA 2503***Surgical First Assistant Principles II***

13 Credit Hours

Students will explore the role of the surgical first assistant and the perioperative management of genitourinary, ophthalmic, otorhinolaryngology, orthopedic, plastics, neurological, cardiothoracic, and peripheral vascular surgical services. (9 lecture hours, 16 clinical hours)

Prerequisite: Admission to the Surgical Assisting Program is required. CSFA 2501 and CSFA 2502, both with a grade of C or better, or equivalent.

CSFA 2504***Surgical First Assistant Principles III***

7 Credit Hours

Students will participate in a clinical internship as a culmination of course work in the Surgical First Assistant Program. Emphasis will be placed on acquiring proficiencies in the clinical setting. Students will participate in mock national exams and scenarios which will prepare them to take the national certification examination. (4 lecture hours, 12 clinical hours)

Prerequisite: CSFA 2503 with a grade of C or better, or equivalent.

Surgical Technology (SURGT)

SURGT 1000***Ethical Considerations in the Health Care Industry***

3 Credit Hours

Students will be introduced to ethical behavior and professional practice expected in healthcare. Topics will include communication, teamwork, conflict resolution, all-hazard preparation, needs of the patient, death, and dying. (3 lecture hours)

Course types: General Education: Humanities (A.A.S., A.G.S.)

SURGT 1001***Surgical Asepsis and Sterile Technique***

4 Credit Hours

Students will be introduced to the operating room facility and preoperative preparation. Students will demonstrate proper sterile and aseptic technique while completing hands-on surgical skills. Operating room surgical equipment, instrumentation, and supplies will also be addressed. (3 lecture hours, 3 lab hours)

SURGT 1101***Surgical Health and Technological Sciences***

3 Credit Hours

Students will be introduced to microbiology, anesthesia, pharmacology, and technological sciences such as information technology, electricity, lasers, minimally invasive surgery, and interventional radiology as it pertains to the surgical technologist. (3 lecture hours)

Prerequisite: Admission to the Surgical Technology program.

SURGT 1102***Surgical Technology Skills***

3 Credit Hours

Students will be introduced to the hands-on perioperative skills required for the surgical technologist in the operating room. Hands-on skills will include those performed in the preoperative, intraoperative, and postoperative environment. Assistant circulator duties will also be addressed. (1 lecture hour, 6 lab hours)

Prerequisite: Admission to the Surgical Technology program.

SURGT 1103***Surgical Technology Concepts III***

12 Credit Hours

Concepts of Surgical Technology Concepts II will be continued with emphasis on acquiring proficiencies in the clinical setting. Students will be introduced to advanced theory in surgical technology and surgical practices. (11 lecture hours, 12 clinical hours)

Prerequisite: SURGT 1102 with grade of C or better, or equivalent.

SURGT 1201***Surgical Technology Concepts***

3 Credit Hours

Students will be introduced to the legal issues and risk management tools necessary for the operating room. Intraoperative and postoperative care will be offered to the surgical patient. (3 lecture hours)

Prerequisite: Completion of SURGT 1101 and SURGT 1102, both with a grade of C or better, or equivalent, or concurrent enrollment in SURGT 1101 and SURGT 1102. Please note a student's ability to remain enrolled in SURGT 1201 is contingent on completion of SURGT 1101 and SURGT 1102 with a grade of C or better in both.

SURGT 1202***Surgical Technology Practicum I***

3 Credit Hours

The concepts of surgical technology will be applied towards a practical experience in the operating room. Students receive hands-on experience, under the guidance of a preceptor, to implement didactic knowledge during a surgical patient procedure. Students will observe and demonstrate hands-on surgical skills. (2 lecture hours, 6 clinical hours)

Prerequisite: Completion of SURGT 1101 and SURGT 1102, both with a grade of C or better, or equivalent, or concurrent enrollment in SURGT 1101 and SURGT 1102. Please note a student's ability to remain enrolled in SURGT 1202 is contingent on completion of SURGT 1101 and SURGT 1102 with a grade of C or better in both.

SURGT 1301***Surgical Pathophysiology and Patient Procedures I***

3 Credit Hours

Students will be introduced to the pathophysiology, surgical procedures, and instrumentation for the following surgical services: general, obstetrics and gynecology, ophthalmic, otorhinolaryngology, and oral maxillofacial. (3 lecture hours)

Prerequisite: SURGT 1201 and SURGT 1202, both with a grade of C or better, or equivalent.

SURGT 1302***Surgical Technology Practicum II***

3 Credit Hours

The concepts of surgical technology will be applied towards a practical experience in the operating room. Students receive hands-on experience, under the guidance of a preceptor, to implement didactic knowledge during a surgical patient procedure. Students will observe and demonstrate hands-on surgical skills. (2 lecture hours, 6 clinical hours)

Prerequisite: SURGT 1201 and SURGT 1202, both with a grade of C or better, or equivalent.

SURGT 1401***Surgical Pathophysiology and Patient Procedures II***

3 Credit Hours

Students will be introduced to the pathophysiology, surgical procedures, and instrumentation for the following surgical services: plastic and reconstructive, genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neurology. (3 lecture hours)

Prerequisite: Completion of SURGT 1301 and SURGT 1302, both with a grade of C or better, or equivalent, or concurrent enrollment in SURGT 1301 and SURGT 1302. Please note a student's ability to remain enrolled in SURGT 1401 is contingent on completion of SURGT 1301 and SURGT 1302 with a grade of C or better in both.

SURGT 1402***Surgical Technology Practicum III***

3 Credit Hours

The concepts of surgical technology will be applied towards a practical experience in the operating room. Students receive hands-on experience, under the guidance of a preceptor, to implement didactic knowledge during a surgical patient procedure. Students will observe and demonstrate hands-on surgical skills. (2 lecture hours, 6 clinical hours)

Prerequisite: Completion of SURGT 1301 and SURGT 1302, both with a grade of C or better, or equivalent, or concurrent enrollment in SURGT 1301 and SURGT 1302. Please note a student's ability to remain enrolled in SURGT 1402 is contingent on completion of SURGT 1301 and SURGT 1302 with a grade of C or better in both.

SURGT 1500***Professional Practice***

4 Credit Hours

Students will be introduced to the employability and leadership skills needed to become successful professional members of the healthcare team. The Certified Surgical Technologist (CST) exam is an important piece of the program required for employment. Students will review necessary content to prepare them for the CST exam. (4 lecture hours)

Prerequisite: SURGT 1401 and SURGT 1402, both with a grade of C or better, or equivalent.

SURGT 1820***Selected Topics I***

1-3 Credit Hours

Introductory exploration and analysis of selected surgical technology topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 to 3 lecture hours)

Prerequisite: Consent of instructor is required.

SURGT 1821***Selected Topics II***

2 Credit Hours

Exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (4 lab hours)

SURGT 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline, and methods of evaluation in coordination with, and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (2 to 8 lab hours)

Prerequisite: Consent of instructor is required.

SURGT 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

SURGT 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Theater (THEAT)

THEAT 1100 (F1 907)***Theater Appreciation***

3 Credit Hours

An introductory survey of theater as a performing art form. Includes study and analysis of historical, social, aesthetic, and technical aspects of traditional and contemporary theatrical expression. Intended for the general student to enhance their ability to become an appreciative and discerning theater audience member. No previous theater experience is required. Play attendance required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1105***Improvisational Acting***

3 Credit Hours

Emphasizes creating believable characterizations for the beginning actor and non-theater student using unscripted interaction. Exercises provide a foundation for using subtext, playing in the moment, and creating truthful relationships in scripted and non-scripted scenes. The use of the body and voice as communicative agents is examined. No previous theater experience is required. Play attendance required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1108***Voice and Diction***

3 Credit Hours

Introduces principles of voice sound production. Designed to teach actors relaxation, breathing, and an understanding of the actor's vocal life and demands. No previous theater experience is required. Play attendance required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1109***Stage Movement***

3 Credit Hours

Introduces principles and techniques of theatrical stage movement. Designed to help actors make their bodies more flexible and efficient instruments of expression. No previous theater experience is required. Play attendance required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1110***Stage Combat - Unarmed***

3 Credit Hours

Introduces basic unarmed violence for the stage focusing on performance and execution of safe, but real, techniques. Play attendance required. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of the instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1111 (TA 914)**Acting I**

3 Credit Hours

Introduces actors to the fundamentals of acting: concentration, observation, playing action and other basics are introduced through acting exercises, improvisations, and scene study. Major acting approaches that develop connection to material or texts that may include exploration of Stanislavski-based techniques and movement-based pedagogies as the basis for helping the actor embody characters. No previous theater experience is required. Play attendance required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1112**Acting II**

3 Credit Hours

Continues development of skills acquired in Acting I. Helps students develop believable characters while working on acting exercises and duet scenes from contemporary dramatic literature, at an intermediate and advanced skill level. Actors are also introduced to acting in period plays. Play attendance required. (3 lecture hours)

Prerequisite: THEAT 1111 with a grade of C or better or equivalent or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1113**Stage Combat-Armed**

3 Credit Hours

Introduces basic armed violence for the stage focusing on performance and execution of safe, but real, techniques. Weapon styles taught for this course will vary each term the class is offered. Play attendance required. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1114**Audition**

3 Credit Hours

Designed to help actors develop material to use in a variety of auditions. Helps students become familiar and more confident with the auditioning process. Play attendance required. (3 lecture hours)

Prerequisite: THEAT 1111 with a grade of C or better or equivalent, or concurrent enrollment in THEAT 1111, or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1115**Stage Makeup**

3 Credit Hours

Introduction to the fundamentals of stage makeup with a focus on comfort of application, color theory, research, execution of design, and support of a dramatic character through stage makeup. Play attendance required. No previous theater or makeup experience required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1116**Stage Management**

3 Credit Hours

Introduction to the world of theater as a stage manager with a backstage view. Provides tips, techniques, procedures, and survival tools for a beginning or experienced stage manager. Play attendance required. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of the instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1120**Rehearsal/Performance**

1-3 Credit Hours

Participation in play production. After auditions and assignments, the class is composed of the students in the college-produced play. This course may be taken four times for credit. (2 to 6 lab hours)

Prerequisite: Consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1121**Performance Practicum**

1-3 Credit Hours

For additional participation in play production. After auditions, casting, and interviews, the class is composed of the students in the college-produced play. Intermediate to advanced exploration and analysis of acting and technical theater, developing a specific character or technical role in a specific production. This course may be taken four times for credit. (2 to 6 lab hours)

Prerequisite: THEAT 1120 with a grade of C or better, or equivalent.

THEAT 1121 can only be enrolled in upon completion of four THEAT 1120 enrollments.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1123**Play Production**

3 Credit Hours

Offers hands-on training through work on a production(s) in a technical assignment. Each student's assignment will be individual in either build or run crew work. This course may be taken four times for credit on different productions. (6 lab hours)

Prerequisite: Consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1140**Summer Repertory Theater**

6 Credit Hours

A performance course that offers the student an opportunity to perform or be on a crew for two or three productions. The repertory may include musicals, plays for children, contemporary and/or classical dramas and comedies. Non-acting opportunities include costuming, set construction, lights, sound, wardrobe, stage make-up, properties, box office work and assistant directing or management, and stage management. (1 lecture hour, 10 lab hours)

Prerequisite: Audition and/or interview. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1151***Dance Theater I***

2 Credit Hours

Emphasizes the principles and practical demands of dance within the musical theater. Primarily jazz-dance based movement, with ballet basics included. Integrates an extensive dance warm-up into movement vocabulary and works on various combinations inspired by classic Broadway musicals from the 1920s through present day. Includes techniques for exercise, audition requirements, various performance styles, and choreographic projects. Field trips and master classes utilized whenever possible. Designed for beginning to intermediate levels of dance students. Play attendance required. This course may be taken four times for credit. (4 lab hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1152***Dance Theater II***

2 Credit Hours

Intermediate to advanced jazz-dance based course with some intermediate to advanced ballet combinations included. Integrates an extensive dance warm-up into movement vocabulary and builds on principles learned in Dance Theater I. Includes advanced studies of classic Broadway musical choreography styles from the 1920s through present day; dance techniques, audition requirements, performance styles, and choreographic projects. Field trips and master classes used whenever possible. Designed for intermediate to advanced level dance students. Some previous training is necessary. Play attendance required. This course may be taken four times for credit. (4 lab hours)

Prerequisite: THEAT 1151 with a grade of C or better, or equivalent or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit.

Prerequisite: Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1820***Selected Topics I***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1823***Selected Topics II***

3 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (6 lab hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 1840***Independent Study***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2205***Voice Acting***

3 Credit Hours

Introduction to voice acting techniques for radio, television, multimedia, and other audio and visual presentations. Play attendance required. (3 lecture hours)

Prerequisite: THEAT 1111 or equivalent, or concurrent enrollment in THEAT 1111 or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2210***Acting for the Camera***

3 Credit Hours

Introduction to the principles and techniques of acting for the camera. Play attendance required. (3 lecture hours)

Prerequisite: THEAT 1112 or equivalent, or concurrent enrollment in THEAT 1112 or consent of instructor.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2211***Repertory Acting***

3 Credit Hours

Helps the actor create roles and work in an ensemble. Selections include children's theater, comedy, drama, musicals, and/or rehearsed improvisational works. Rehearsal and performance is required. (3 lecture hours)

Prerequisite: Consent of instructor based on audition. Course requires Reading Placement Category One. This course may be repeated up to three times for credit.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2221 (TA 911)***Stagecraft***

3 Credit Hours

Introduction to stage equipment, tools, materials, and traditional methods of set construction and scenic painting. Play attendance required. (2 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2222 (TA 911)***Technical Production***

3 Credit Hours

Introduction to the new materials and techniques of technical production, including special effects, lighting, and sound. Play attendance required. (2 lecture hours, 2 lab hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2230***Play Directing***

3 Credit Hours

Introduces directorial choices about scripts, script analysis, casting, focus of scenes, and the mood, rhythm, pace and main idea of productions. A participatory course that includes readings and attendance at plays, exercise work, and scene direction. Play attendance required. (3 lecture hours)

Prerequisite: Course requires Reading Placement Category One.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2800***Special Project***

1-3 Credit Hours

Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent (to be determined by the disciplines). This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.).

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Test Score-Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2820***Advanced Selected Topics I***

3 Credit Hours

Advanced exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (3 lecture hours)

Prerequisite: At least one course in the discipline or consent of instructor. Course requires Reading Placement Category One.

Course types: General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

THEAT 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Fine Arts (A.A.S., A.G.S.), General Education: Humanities (A.A.S., A.G.S.)

Welding Technology (WELD)

WELD 1100***Welding I***

3 Credit Hours

Basic oxy-fuel, gas metal arc, shielded metal arc and gas tungsten arc welding processes. Safety procedures required to set up and shut down welding equipment for the various processes. Hands-on experience includes practice with the four welding systems using various thickness of steel. Industrial standards and American Welding Society (AWS) standards for quality are discussed. (1 lecture hour, 4 lab hours)

WELD 1112***Oxy-Fuel, Welding, Plasma Cutting and Brazing***

3 Credit Hours

Operation of oxy-acetylene welding & cutting equipment, and plasma cutting. Students learn to produce quality welds and braze joints in the flat, horizontal, vertical, and overhead positions. This course introduces cutting methods to profile, pipe, square, and bevel. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1100 or equivalent.

WELD 1122***Shielded Arc Welding (SMAW)***

3 Credit Hours

Theory and practice in the preparation and welding of steel joints in various positions using the Shielded Metal Arc Welding (SMAW) process. Safety, electrode selection, machine set-up, weld joint selection, and inspection and testing. Skill is developed in producing different groove and fillet welds in various positions. American Welding Society (AWS) testing standards are used. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1100 or equivalent.

WELD 1132***Gas Metal Arc Welding (GMAW) Carbon Steel Welding***

3 Credit Hours

This course uses the Gas Metal Arc Welding (GMAW) process also commonly known as Metal Inert Gas (MIG) welding. Both solid steel and cored wire welding on carbon steel joints. Setup and operation of MIG welding equipment will be covered. Students will prepare various welding joints to be welded in several positions. American Welding Society (AWS) testing standards are used. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1100 or consent of instructor.

WELD 1134***Gas Metal Arc Welding (GMAW) Aluminum Welding***

3 Credit Hours

This course uses the Gas Metal Arc Welding (GMAW) with aluminum wire welding on common industrial joints. Travel direction, weave motion, bead sequence, and gun angles for out-of-position welding on stainless is emphasized. Setup and operation of the GMAW welder under varying conditions is given emphasis. Course may be repeated two times for skill development. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1132 with a grade of C or better, or equivalent, or consent of instructor.

WELD 1136***Gas Metal Arc Welding (GMAW) Stainless Steel***

3 Credit Hours

This course specializes in Gas Metal Arc Welding (GMAW) with stainless steel wire welding on common industrial joints. Travel direction, weave motion, bead sequence, and gun angles for out-of-position welding on stainless are emphasized. Setup and operation of the GMAW welder under varying conditions are given emphasis. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1132 with a grade of C or better, or equivalent or consent of instructor.

WELD 1138***Gas Metal Arc Weld (GMAW) Bronze***

3 Credit Hours

This course specializes in Gas Metal Arc Welding (GMAW) with bronze wire welding on common industrial joints. Travel direction, weave motion, bead sequence, and gun angles for out-of-position welding on steel and aluminum are emphasized. Setup and operation of the GMAW welder under varying conditions are emphasized. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1132 with a grade of C or better, or equivalent or consent of instructor.

WELD 1142***Gas Tungsten Arc Welding (GTAW)***

3 Credit Hours

This course will cover the Gas Tungsten Arc Welding (GTAW) process also referred to Tungsten Inert Gas (TIG). Theory and practice will be covered in detail. Students will develop skills on various joints in several positions. This course will focus on carbon steel, stainless steel, and aluminum. American Welding Society testing standards are used. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1100 or consent of instructor.

WELD 1144***Gas Tungsten Arc Welding (GTAW) Aluminum***

3 Credit Hours

Theory and practice of Gas Tungsten Arc Welding (GTAW) in all positions on various joint configurations using aluminum filler. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1142 with a grade of B or better or equivalent or consent of instructor.

WELD 1146***Gas Tungsten Arc Welding (GTAW) Stainless Steel***

3 Credit Hours

Theory and practice of Gas Tungsten Arc Welding (GTAW) in all positions on various joint configurations using stainless steel filler. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1142 with a grade of B or better or equivalent or consent of instructor.

WELD 1148***Gas Tungsten Arc Welding (GTAW) Exotic Alloy***

3 Credit Hours

Theory and practice of Gas Tungsten Arc Welding (GTAW) in all positions on various joint configurations using exotic alloy metals. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1146 with a grade of B or better, or equivalent, or consent of instructor.

WELD 1151***Pipe Welding and Fabrication***

3 Credit Hours

This course will cover the technical skills required to be an entry-level pipe welder or welder helper. Shielded metal arc welding process will be used to produce quality weldments in various positions. Open-root, full-penetration welds utilizing American Welding Society (AWS) F3 and F4 welding electrodes will be used. Additionally, the course will teach welding inspection of discontinuities and corrective actions. American Welding Society testing standards are used. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1122 or consent of instructor.

WELD 1160***Skill Assessment***

3 Credit Hours

This capstone course is intended to evaluate the students on all common welding processes. Students will focus on challenging projects with various metals. The students will also complete various v-groove weldments. American Welding Society testing standards are used. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1100, WELD 1112, WELD 1122, WELD 1132, and WELD 1142 or equivalent or consent of instructor.

WELD 1165***Blueprint Reading and Fabrication***

4 Credit Hours

Prepares the welding student to interpret complex drawings as applied in the welding trade and to become familiar with welding symbols and their significance. Emphasis will be on developing the ability to transfer the two-dimensional print to the actual three-dimensional object. The student will gain experience in related fabrication mathematical calculations. (3 lecture hours, 2 lab hours)

Prerequisite: WELD 1100 with a grade of C or better, or equivalent, or consent of instructor.

WELD 1172***Robot Welding I***

3 Credit Hours

Operate a welding robot. This includes writing programs that control robot path, weld start and stop, and welding Parameters. The student will learn basic operation and maintenance required by the American Welding Society operator level one certification. Individual student learning and skill development determines whether or not the student successfully achieves certification. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1132 and ELMEC 1171, both with a grade of B or better, or consent of instructor.

WELD 1820***Selected Topics***

1-6 Credit Hours

Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. (1 to 6 lecture hours, 2 to 12 lab hours)

WELD 1840***Independent Study - Individualized***

1-4 Credit Hours

Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. (2 to 8 lab hours)

Prerequisite: Consent of instructor is required.

WELD 2000***Introduction to AWS Level 1***

2 Credit Hours

Covers occupational orientation, safety and health of welders, drawing and welding symbol interpretation, thermal cutting processes and welding inspection and training utilizing American Welding Society (AWS) Sense 1 standards. This course may be taken three times for credit for skills development. (2 lecture hours)

Prerequisite: Corequisite WELD 1100, or consent of instructor.

WELD 2001***AWS Level 1-SHIELDED Metal Arc Welding (SMAW)***

3 Credit Hours

Theory and practice in the preparation and welding of steel joints in various positions. Safety, electrode selection, inspection, and testing. Skill is developed in producing different position butt and fillet welds. American Welding Society (AWS) testing is emphasized. This course may be taken three times for credit for skills development. (1 lecture hours, 4 lab hours)

Prerequisite: WELD 1100 and WELD 2000, both with a grade of C or better, or equivalent or consent of instructor.

WELD 2002***AWS Level 1 Gas Tungsten Arc Welding (GTAW)***

3 Credit Hours

Theory and practice in the preparation and welding of steel joints in various positions. Safety, equipment selection, inspection, and testing. Skill is developed in producing different position butt and fillet welds. American Welding Society testing is emphasized. This course may be taken three times for credit for skills development. (1 lecture hours, 4 lab hours)

Prerequisite: WELD 1100 and WELD 2000, both with a grade of C or better, or equivalent or consent of instructor.

WELD 2003***AWS Level 1 Flux Core Arc Welding (FCAW)***

3 Credit Hours

Theory and practice in the preparation and welding of steel joints using Flux Core Arc Welding (FCAW) in various positions. Safety, electrode selection, inspection, and testing. Skill is developed in producing different position butt and fillet welds. American Welding Society (AWS) testing is emphasized. This course may be taken three times for credit for skills development. (1 lecture hours, 4 lab hours)

Prerequisite: WELD 1100 and WELD 2000, both with a grade of C or better, or equivalent or consent of instructor.

WELD 2004***AWS Level 1 Gas Metal Arc Welding (GMAW)***

3 Credit Hours

Theory and practice in the preparation and welding of steel joints using Gas Metal Arc Welding (GMAW) in various positions. Safety, electrode selection, inspection, and testing. Skill is developed in producing different position butt and fillet welds. American Welding Society (AWS) testing is emphasized. This course may be taken three times for credit for skills development. (1 lecture hours, 4 lab hours)

Prerequisite: WELD 1100 and WELD 2000, both with a grade of C or better, or equivalent or consent of instructor.

WELD 2272***Robot Welding II***

3 Credit Hours

Operate a welding robot. This includes writing programs that control robot path, weld start and stop, and welding parameters. The student will learn complex welding operations, work cell maintenance, and record keeping as required by the American Welding Society operator level two certification. Individual student learning and skill development determines whether or not the student successfully achieves certification. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 1172 with a grade of B or better or consent of instructor.

WELD 2273***Robot Welding III***

3 Credit Hours

Operate a welding robot environment. This course includes writing programs, fixturing, process maintenance, and record keeping. The student will learn operations and welding maintenance required by the American Welding Society welding technician certification. Individual student learning and skill development determines whether or not a student successfully achieves certification. (1 lecture hour, 4 lab hours)

Prerequisite: WELD 2272 with a grade of B or better or consent of instructor.

WELD 2860***Internship (Career & Technical Ed)***

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

WELD 2865***Internship Advanced (Career & Tech Ed)***

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

Zoology (ZOOL0)

ZOOL0 1200

Introduction to Animal Care in Captivity

3 Credit Hours

Students will explore the basics of caring for wildlife in captivity including diet, housing, animal capture, containment, animal behavior and disease. Other topics will include behavioral enrichment, training, wildlife rehabilitation, conservation, veterinary care, and employment opportunities. (3 lecture hours)

ZOOL0 1220

Insects and Humans

3 Credit Hours

Study of insect life to include identification and ecology. Recognition and control of major pests as well as other arthropods such as arachnids, millipedes and centipedes. Relationships of insects to humans in the areas of agriculture, culture, forestry and medicine are explored. (2 lecture hours, 2 lab hours)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOL0 1800

Special Project

1-3 Credit Hours

Special project courses in Zoology cover topics not otherwise covered by general education courses and other courses in the Catalog for the Zoology discipline. These courses require direct experience and focused reflection in an in-depth study of a specific topic and/or the critical analysis of contemporary issues. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of Zoology concepts, theories, principles, and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOL0 1840

Independent Study

1-4 Credit Hours

Exploration and analysis of topics within Zoology to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOL0 2250

Comparative Vertebrate Zoology

4 Credit Hours

The classification, anatomy and physiology of vertebrates is presented in a comparative manner. Topics include vertebrate evolution, vertebrate development, and various body systems and their organs. Student dissection of various examples of vertebrates is required. (3 lecture hours, 3 lab hours)

Prerequisite: BIOLO 1151 and BIOLO 1152.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOL0 2260

Invertebrate Zoology

4 Credit Hours

Study of invertebrate phyla. Topics include invertebrate taxonomy, anatomy, physiology, reproduction, evolution, and the relationships of invertebrate with their environment. (2 lecture hours, 4 lab hours)

Prerequisite: BIOLO 1151 and BIOLO 1152 or equivalent.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOL0 2800

Special Project

1-3 Credit Hours

Special project courses in Zoology cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline, while building on academic knowledge and skills acquired in introductory-level classes. These courses require direct experience and focused reflection in an in-depth study of a specific topic and/or the critical analysis of contemporary issues. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of more complex zoology concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.)

Prerequisite: At least one course in Zoology or consent of instructor.

Course types: General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOL0 2860

Internship (Career & Technical Ed)

1-4 Credit Hours

Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOL0 2865

Internship Advanced (Career & Tech Ed)

1-4 Credit Hours

Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOLO 2870***Internship (Transfer)***

1-4 Credit Hours

Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

ZOOLO 2871***Internship - Advanced (Transfer)***

1-4 Credit Hours

Continuation of Internship (Transfer). Course requires participation in work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

Prerequisite: Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the dean from the academic discipline where the student is planning to earn credit.

Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.), General Education: Physical/Life Science (A.A.S., A.G.S.)

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(2024)confirm, via email to me, that they would approve moving the proposal forward before the full 2 weeks/10 working days

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A.S. Moraine Valley Community College
B.A. Trinity Christian College
M.Ed. Olivet Nazarene University

Kathleen D. Dexter-Mitchell, Professor, Mathematics (2012)
B.M. Baylor University
M.S., Ph.D. University of Illinois at Chicago

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B.S., Ph.D. Northern Illinois University

Michael J. Dietz, Professor, Anthropology (2008)
B.A. Luther College
M.S. University of Utah
Ph.D. University of Missouri

Julia M. diLiberti, Professor, Humanities (2003)
B.A. Knox College
M.A., Ph.D. University of Illinois

Larinda S. Dixon, Professor, Nursing (2001)
B.S.N. Hampton University
M.S.N. St. Xavier University
Ed.D. Northern Illinois University

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B.S. Illinois State University

M.A. Roosevelt University

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B.A. Judson University

M.S. National Louis University

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A.S. Harper College

B.S. Northwestern University

M.A., M.Ed. University of Illinois

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B.A. Butler University

M.S. Southern Illinois University

Ed.D. National Louis University

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A.A.S. College of DuPage

B.S. Purdue University West LaFayette

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B.A. University of St. Francis

M.A. Concordia University Portland

E

David Ellis, Assistant Professor, Welding (2014)

B.A. Northeastern Illinois University

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B.A., M.A. Northern Illinois University

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M.A. Roosevelt University

Ph.D. Loyola University Chicago

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B.S. Illinois State University

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Carolyn R. England, Professor, Computer and Information Science (1997)

A.S. Moraine Valley Community College

B.S., M.S. University of Illinois

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Arizona State University

Jason T. Ertz, Reference Librarian (2007)

B.A. Southern Illinois University

M.A. University of Wisconsin – Madison

Ed.M. University of Illinois – Champaign-Urbana

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B.A. Oberlin College

M.A. North Carolina State University

Ph.D. Purdue University

F

David R. Fazzini, Professor, Physics (2002)

B.S., Ph.D. Illinois Institute of Technology

Christopher C. Ferro, Professor, Accounting (2013)

B.S., M.B.A. Northern Illinois University

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B.S. York College

M.A. Queens College

Kathleen M. Finan, Professor, Anatomy and Physiology (2010)

B.S. University of Illinois

M.D. University of Minnesota

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B.S. Aurora University

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Jason D. Florin, Professor, Human Services (2010)

B.A. University of Illinois at Chicago

M.H.S. Governors State University

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B.S. Bradley University

M.S. Grand Canyon University

Graduate Certification International Institute of Restorative Practices (IIRP)

J.D. Northern Illinois University

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B.F.A. University of Tennessee

M.F.A. University of Illinois at Urbana-Champaign

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B.A. Clark University

M.S. Columbia University

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B.A., M.A., University of Illinois at Urbana-Champaign

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G

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B.S.N. Northern Illinois University

M.S.N. Rush University

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B.S. University of Illinois

M.S. Lewis University

Ph.D. Governors State University

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B.S., M.S. Illinois State University

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B.S. Southern Illinois University

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M.A. Washington State University

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Ph.D. National Louis University

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B.A. Augustana College

M.S. Iowa State University

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B.D., M.TH. Serampore University

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M.Ed. American College of Education

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B.S. Purdue University

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B.S.P.T., M.H.A. Maryville University – St. Louis

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M.S. Roosevelt University

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B.S. Tamkang University

M.S. University of Minnesota

M.B.A. University of Illinois at Chicago

Ed.D. Northern Illinois University

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B.A. Washington College

M.A., Ph.D. The Pennsylvania State University

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B.A. Northeastern Illinois University

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Ed.D. Aurora University

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B.A., M.A. University of Illinois Urbana-Champaign

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B.A. Elmhurst College

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B.F.A. University of Illinois-Champaign/Urbana

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M.A., Ph.D. University of Massachusetts–Amherst

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B.S., M.A.S., Ed.D. Northern Illinois University

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B.S., M.S. Northern Illinois University

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B.A. Marquette University
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B.A. Western Illinois University
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B.A. Humboldt State University
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M.L.I.S. Dominican University
M.M. Northwestern University

Melissa K. McKirdie, Assistant Professor, Diagnostic Medical Imaging Sonography (2012)
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Stephanie McLemore, Instructor, Cosmetology (2019)
A.G.S. College of DuPage

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B.S. University of Ottawa
Ph.D. Western University

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A.A. Solano Community College
B.A., M.A. Northern Illinois University

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B.A., M.A. University of Chicago
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B.F.A. Illinois Institute of Art Schaumburg

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B.A. Cornell University
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B.A. Dickinson College
M.A., Ph.D. State University of New York – Binghamton

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Ed.D. Ferris State University

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B.A. University of California Santa Cruz
M.A. Ph.D. University of California Davis

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B.A. Illinois Benedictine College
M.A., Ph.D. University of Illinois at Chicago

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B.S., M.S. Southern Illinois University

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M.Ed. American College of Education

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A.A. Triton College
B.A. University of Illinois at Springfield
M.A. George Washington University

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B.S. Western Illinois University
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B.S.Ed., M.S.Ed., M.B.A. Northern Illinois

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A.A. College of DuPage
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M.S. University of Illinois at Urbana-Champaign
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B.S. University of Illinois at Chicago

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M.F.A. Cornell University

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M.A. Saint Louis University
Ph.D. University of Wisconsin Milwaukee

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M.S. Indiana University

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B.S., M.S. Illinois Institute of Technology

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B.A. Shenandoah Conservatory of Music
M.A. University of Illinois Urbana Champaign
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