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Academic Calendar 2015 - 2016

Fall 2015 Semester
August 24       Online Classes Begin
August 26       Fall Semester Classes Begin*
September 7     Labor Day - College Closed
September 18    Faculty Planning Day - No Classes
September 21    Online 12-Week Classes Begin
October 16      Online First Eight-Week Classes End
October 19      Online Second Eight-Week Classes Begin
October 21      Midterm
November 26-27  Thanksgiving - College Closed
December 11     Online Classes End
December 14-18  Final Exam Week
December 18     Last Day of Fall Semester

Winterim Classes
Dec. 19-Jan. 16 Winterim Classes
Go to www.swcciowa.edu for the winterim schedule.

Spring 2016 Semester
January 11      Spring Semester Classes Begin*
January 19      Online Classes Begin
February 15     Online 12-Week Classes Begin
March 4         Midterm
March 11        Online First Eight-Week Classes End
March 14        Online Second Eight-Week Classes Begin
March 21-25     Spring Break
May 2-6         Final Exam Week
May 6           Online Classes End
May 6           Last Day Spring Semester/Spring Commencement

Summer 2016 Session
May 9           Career and Technical Education Session Begins*
May 30          Memorial Day - College Closed
May 31          Online First Eight-Week Classes for Session I Begin
May 31          Summer Session I, Arts & Sciences Classes Begin
June 13         Online Second Eight-Week Classes for Summer Session I
June 24         Last Day Summer Session I/Summer Commencement
July 4          Independence Day - College Closed
July 5          Summer Session II, Arts & Sciences Classes Begin*
July 25         Last Day Session I Online Classes
July 29         Summer Session II, Arts & Sciences Classes End
August 7        Last Day Session II Online Classes

Academic Calendar 2016 - 2017

Fall 2016 Semester
August 22       Online Classes Begin
August 24       Fall Semester Classes Begin*
September 5     Labor Day - College Closed
September 16    Faculty Planning Day - No Classes
September 19    Online 12-Week Classes Begin
October 14      Online First Eight-Week Classes End
October 17      Online Second Eight-Week Classes Begin
October 19      Midterm
November 24-25  Thanksgiving - College Closed
December 9      Online Classes End
December 12-16  Final Exam Week
December 16     Last Day of Fall Semester

Winterim Classes
Dec. 20-Jan. 17 Winterim Classes
Go to www.swcciowa.edu for the winterim schedule.

Spring 2017 Semester
January 16      Spring Semester Classes Begin*
January 17      Online Classes Begin
February 13     Online 12-Week Classes Begin
March 10        Midterm
March 10        Online First Eight-Week Classes End
March 13        Online Second Eight-Week Classes Begin
March 20-24     Spring Break
May 5           Online Classes End
May 8-12        Final Exam Week
May 12          Last Day Spring Semester/Spring Commencement

Summer 2017 Session
May 15          Career and Technical Education Session Begins*
May 29          Memorial Day - College Closed
May 30          Online First Eight-Week Classes for Session I Begin
May 30          Summer Session I, Arts & Sciences Classes Begin
June 12         Online Second Eight-Week Classes for Summer Session I
June 30         Last Day Summer Session I/Summer Commencement
July 3          Summer Session II, Arts & Sciences Classes Begin*
July 4          Independence Day - College Closed
July 10         Online Four-Week Session Begins
July 24         Last Day Session I Online Classes
July 28         Summer Session II, Arts & Sciences Classes End
August 6        Last Day Session II Online Classes

For the most up-to-date college calendar, please visit the “Calendar” link on SWCC’s Web site at www.swcciowa.edu

*Tuition and fees due. Paid in full or enrolled in Nelnet tuition payment plan through SWCC business office (may enroll online by clicking e-cashier on SWCC’s homepage).
General Information

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Message from our President

I am pleased you are taking time to explore the many learning opportunities Southwestern Community College offers its students. Southwestern is a comprehensive two-year public institution offering transfer courses, career and technical education programs, continuing education courses, and industrial training classes.

What is the makeup of our student body? Anyone who desires, and is committed to obtaining an education, is welcome. Our faculty and staff are dedicated to providing challenging learning experiences in an environment conducive to learning.

This catalog provides an introduction to the college. It is filled with valuable information about the programs and services available. Use it to assist you as you select and complete your course work at Southwestern. I also invite you to participate in student activities, such as clubs, athletics, music, and student government to get a well-rounded educational experience.

On behalf of the Board of Directors, administration, faculty and staff, I welcome you to Southwestern. We look forward to meeting you and assisting as you pursue your educational goals.

Dr. Barbara J. Crittenden
President

Southwestern Community College
1501 West Townline Street
Creston, IA 50801
P 641.782.7081
F 641.782.3312
W www.swcciowa.edu
E admissions@swcciowa.edu

Red Oak Center
2300 North 4th Street
Red Oak, IA 51566
P 712.623.2541
F 712.623.4534
E redoak@swcciowa.edu

Osceola Center
2520 College Drive
Osceola, IA 50213
P 641.342.3531
F 641.342.3627
E osceola@swcciowa.edu

Board of Trustees
Kenneth Rech, President
District 5
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Zach Gunsolley
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Carol Saxton
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District 7
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District 3

Purpose Statement
Southwestern Community College exists in order that community members have opportunities to gain skills and knowledge sufficient for successful employment, higher education achievement, and lifelong learning.

Vision Statement
Southwestern Community College will be the center of educational excellence for the advancement of our students and communities.

Core Values
» Providing an innovative learning community conducive to the lifelong learning of constituents.
» Partnering with members of the Area XIV community, Community Colleges of Iowa and others.
» Offering high quality, student-centered, accessible, and affordable education.
» Meeting the diverse needs of students.
» Promoting educational opportunities for under-represented populations.
» Strengthening communities through economic development.
» Maintaining quality facilities, equipment, and instructional technology.
» Recognizing our people as our greatest asset.
College History

Southwestern Community College began operation as a part of Iowa’s Community College system on July 1, 1966. In assuming its role as a new institution, Southwestern inherited the facilities and instructional programs of Creston Community College, which had been operated by the Creston Community School district since 1926.

The campus site was purchased in 1966. The first building on the site, the Instructional Center, was occupied in the summer of 1970. The campus expanded with the addition of the Student Center, Administration Center, and Technical Center. In 1995, an Area Arts and Wellness Center was constructed on the Southeast edge of campus. This building provides facilities for adult and continuing education, a performing arts auditorium, and the YMCA with a gymnasium, Olympic-size pool, and many other recreation and fitness facilities. The campus also includes outdoor facilities for tennis, baseball, and softball.

In 1998, the Student Center was expanded by 3,320 square feet to house the college bookstore. A 7,500 square foot building with classrooms, offices, and a shop area was added at the agricultural site in 2001. A 7,650 square foot building, Technical Center II, was completed in 2004 to offer more space for career and technical education programs. In 2006, a 16,500 square foot facility, the Allied Health and Science Center, became the new location for nursing education programs. That same year an apartment-style residence hall, Spartan Suites, was constructed to allow for an increase in demand for on-campus housing. In the fall of 2010 Spartan Hall was built and in the fall of 2014 Spartan Court was added, both are three-story apartment-style residence halls. The college currently has 17 buildings on nearly 300 acres.

Also in 2010, the Student Center went through reconstruction on the upstairs level to transform the cafeteria into a food-court type area, the Spartan Cafe, and remodel the seating area and restrooms.

In 2000, Southwestern began offering online courses through the Iowa Community College Online Consortium (ICCOC). ICCOC is made up of seven Iowa community colleges. The consortium offers online courses leading to various degree program options.

In addition to offerings at the main campus in Creston, Southwestern offers programming at two off-campus centers:

- The college’s Red Oak Center was opened in 1985 to fill a growing need to serve the Montgomery County area of Southwestern’s district. The center moved to a permanent location at 2300 North Fourth Street near Highway 34 in 1991.
- In 1992, the Osceola Center was opened in Osceola as a joint project between Southwestern Community College and Job Training Partnership Act (JTPA). The center is located at 2520 College Drive (west of Interstate 35). The building was expanded by 8,000 square feet in 1999.

Accreditation

Southwestern Community College is accredited by the Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL, 60604, phone 800.621.7440, Web site www.hlcommission.org. The college is also accredited by the Iowa Department of Education. Programs have been approved by the Veterans and Military Education Unit of the Iowa Department of Education for veterans education benefits through the U.S. Department of Veterans Affairs.

Special Accreditation for Academic Programs:

- The ADN and LPN programs are approved by the Iowa Board of Nursing.
- The auto collision repair/refinish and automotive repair technology programs are certified by the National Automotive Technicians Education Foundation (NATEF).
- The electrical technology program is approved by the Iowa Electrical Board Post-Secondary Electrical Program.
- Concurrent enrollment programs are accredited by the National Alliance of Concurrent Enrollment Partnerships (NACEP).

Using the College Catalog

The information in this catalog is provided for informational purposes only. Statements in the catalog should not be construed as the basis for a contract. Every effort has been made to make the catalog accurate as of the publication date. For the most recent version of the college catalog, please visit SWCC’s Web site at www.swcciowa.edu.

The college reserves the right to make changes to academic or other requirements, course offerings, programs, rules, regulations, fees, etc., without notice to individual students.

For more information on policies, procedures, and services, please view SWCC’s current Student Handbook, which is updated annually.

Compliances

Educational Equity Policy Statement

It is the policy of Southwestern Community College to provide equal educational and employment opportunities and not to illegally discriminate on the basis of race, color, national origin, sex, disability, age in employment, sexual orientation, gender identity, genetic information, creed, religion, veteran status, associational preference and actual or potential parental, family or marital status in its programs, activities or employment and personnel policies and practices.

This institution shall provide program activities and curriculum and instructional resources which will reflect the racial and cultural diversity present in the United States as well as the variety of careers, roles, and lifestyles open to both men and women in our society. One of the objectives of its programs, curriculum, services and teaching strategies is to reduce stereotyping and to eliminate bias. The curriculum, programs, and services shall foster respect and appreciation for the cultural diversity found in our country and an awareness of the rights, duties, and responsibilities of each individual as a member of a pluralistic society.

In addition to arts & sciences college transfer courses, Southwestern Community College offers career and technical programs in the following areas of study:

Accounting
Accounting & Info Tech
Administrative Office Technology
Agricultural Programs
Auto Collision Repair/Refinish
Automotive Repair Technology
Business Administration
Carpentry and Building Trades
Electrical Technology
Graphic Design
Industrial Technology
Information Technology Systems Networking
Management Information Systems
Nursing
Office Skills
Professional Music
Web Development
Welding

It is the policy of Southwestern Community College to affirmatively recruit women and men, members of diverse racial or ethnic groups, and persons with disabilities for job categories where they are underrepresented. A fair and supportive environment will be provided for all students and employees.

Employees, applicants for employment, applicants for enrollment, students, and their parents shall have the right to file a formal complaint alleging noncompliance by Southwestern Community College with federal and state regulations requiring nondiscrimination in educational programs and employment.

Inquiries or grievances related to this policy may be directed to: Jolene Griffith, Educational Equity and Title IX Coordinator, Southwestern Community College, 1501 W. Townline St., Creston, IA 50801, 641.782.1456 or 800.247.4023, ext. 456 or TitleIXCoordinator@swcciowa.edu; or the Office for Civil Rights (Midwestern Division), U.S. Department of Education, Citigroup Center, 400 W. Madison Street, Suite 1475, Chicago, IL 60661-4544, phone number 312.730.1560, fax 312.730.1576, TDD 800.877.8339 or e-mail OCR.Chicago@ed.gov.

Information regarding the federal and state regulations governing equal education and employment opportunity are available in the human resources office in the Administration Center.

Accommodations

Southwestern is committed to the regulations of the Americans with Disabilities Act in making reasonable accommodations for students or patrons of the college in accessing its facilities. Any student with a disability wanting to request accommodations should notify student services of his/her needs, and the college will do what is reasonable to affect changes and assist the student in being successful in the college environment.

The Educational Equity Committee is composed of employees representing all levels at Southwestern as well as student representatives. The committee meets at least twice a year to review equity activity and to monitor compliance of recommendations for accessibility and accommodations at all of our locations.

For further assistance regarding accommodations or to identify special needs, students should contact the director of student development, Administration Center, 641.782.1458. A student who feels his/her accommodation needs have not been met should contact the director of human resources and educational equity coordinator, Administration Center, 641.782.1456.

Policy Prohibiting Discrimination, Harassment & Bullying

It is the policy of Southwestern Community College to have a campus environment for every student and employee that is free from hostility, especially when such hostility is based on the person’s race, color, national origin, sex (including sexual harassment, sexual violence, sexual misconduct, domestic violence, dating violence, or stalking), disability, age in employment, sexual orientation, gender identity, genetic information, creed, religion, veteran status, associational preference and actual or potential parental, family or marital status that has the purpose or effect of unreasonably interfering with a person's employment or educational experience or creates an intimidating, hostile, offensive working, educational or living environment.

The college will provide, consistent with state and federal law, reasonable accommodations to persons with disabilities and reasonable accommodations for religious practices.

Examples of harassment and conduct prohibited by this policy and in reference to the protected classes listed include, but are not limited to:

» Denying a person access to an educational program
» Denying salary increases and/or promotions
» Preventing a person from using college facilities or services
» Instigating or perpetuating an environment that is unwelcome or hostile

Harassment:

Communications or conduct that are based on a person’s race, color, national origin, sex (including sexual harassment, sexual violence, sexual misconduct, domestic violence, dating violence, or stalking), disability, age in employment, sexual orientation, gender identity, genetic information, creed, religion, veteran status, associational preference and actual or potential parental, family or marital status that has the purpose or effect of unreasonably interfering with a person's employment or educational experience or creates an intimidating, hostile, offensive working, educational or living environment.

Discrimination:

Action that is based on a person’s race, color, national origin, sex, disability, age in employment, sexual orientation, gender identity, genetic information, creed, religion, veteran status, associational preference and actual or potential parental, family or marital status that:

» adversely affects a term or condition of a person’s employment, education, living environment or participation in a college activity; or

» is used as a basis for or a motivating factor in decisions affecting the person’s employment, education, living environment or participation in a college activity.
Bullying:

Communications or conduct which threaten the fundamental principles of the college relating to mutual respect and individual dignity and which is hurtful to someone either as a single incident or over a period of time. It can be either physical, verbal or indirect or a combination of any of these forms. It may include: intimidation, exclusion, rumor-spreading, name-calling, anonymous messages, or damage to or theft of personal property. Other particular conduct which also constitutes a violation of this policy:

» Cyberbullying, which includes but is not limited to:

1. Texting or e-mailing unpleasant, frightening, or rude phone messages.
2. “Sexting,” where sexually inappropriate phone pictures of one person are used by another person to upset, harass, or demean the person in the pictures.
3. Posting abusive or demeaning comments on social networking sites.

» Sexual and sexist bullying includes:

1. Making offensive, derogatory or demeaning comments or innuendos to a person linked to their gender, sexuality, or sexual activity.
2. Displaying sexual or pornographic pictures with intent to insult, demean, or harass another person.

» All other communications or conduct which are offensive, derogatory, or demeaning based on a person’s race, color, national origin, sex, disability, age in employment, sexual orientation, gender identity, genetic information, creed, religion, veteran status, associational preference and actual or potential parental, family or marital status.

Retaliation is prohibited.

Any adverse action or conduct taken by any person against a person who has sought relief under this policy is strictly prohibited and will be regarded as a separate and distinct violation of this policy. Examples of retaliatory action include assigning low grades, assigning undesirable work schedules, and/or giving deflated performance reviews. This protection against retaliation extends to any person who opposes acts of harassment or discrimination or bullying or who testifies, assists, or participates in a manner in an investigation, proceeding, or hearing relative to harassment or discrimination.

Reporting discrimination, harassment, bullying and/or retaliation.

Any person who believes he/she has been subjected to discrimination, harassment (including sexual harassment, sexual violence, sexual misconduct, domestic violence, dating violence, or stalking), bullying or retaliation may report the behavior to the educational equity (Title IX) coordinator, 641.782.1456 or 800.247.4023, ext. 456. Reports may be filed by the alleged victim or others on their behalf. Anonymous reports will be accepted, however, options available to college authorities for investigating or resolving anonymous reports may be limited because of the unique challenges presented.

Individuals also always have the right to file a formal complaint with:

Iowa Civil Rights Commission in Des Moines 515.281.4121 or 800.457.4416 or
Office for Civil Rights (Midwestern Division), US Department of Education in Chicago, IL 312.730.1560 or e-mail OCR.Chicago@ed.gov

Will my concern be confidential?

The college will preserve confidentiality to the extent possible and allowed by law. The college does not employ counseling employees subject to special confidentiality. An individual may request confidential reporting of a crime to a responsible employee; however, it is the duty of the responsible employee to report the names of individuals involved as well as relevant facts regarding the alleged incident (including date, time, and location) to the educational equity (Title IX) coordinator. If the individual requests confidentiality, the educational equity (Title IX) coordinator will make every effort to respect this request and will evaluate the request in the context of the college’s responsibility to provide a safe and nondiscriminatory environment for all.

Non-confidential reporting.

Because information relating to the report will be shared in the course on a need-to-know basis, or as otherwise required by law or required under this policy, it is not possible to guarantee complete confidentiality. The alleged victim may request confidentiality and the college will take such requests seriously, however such requests may severely limit the college’s ability to investigate and take reasonable action in response to a report. In cases involving student sexual violence, the Title IX coordinator will consult with the Crisis Intervention and Advocacy Center regarding the seriousness of the alleged violation.

Compliance with Southwestern’s procedures prohibiting discrimination, harassment, and bullying is mandatory. Non-compliance with federal and state regulations requiring nondiscrimination in educational programs may result in severe disciplinary action. For more information regarding disciplinary sanctions for violations of this policy, refer to the Student Code of Conduct in the Student Handbook. Questions regarding student conduct may also be directed to the dean of student services, 641.782.1413.

Sexual Harassment/Sexual Offense/Sexual Violence

Sexual harassment is a violation of Title IX in that it constitutes differential treatment on the basis of sex (including sexual harassment, sexual violence, sexual misconduct, domestic violence, dating violence, or stalking). Title IX applies to any educational program or activity and protects both students and employees.

Effective July 1, 1992, House File 2028, an Act requiring institutions of higher education to establish policies relating to sexual abuse and providing the Act’s applicability was enacted by the General Assembly of the State of Iowa and signed by the Governor.

Southwestern Community College will not tolerate the sexual abuse/violence of students, faculty, and/or staff on campus, facilities and/or activities. It is the policy at the college to provide education to help prevent, facilitate the reporting of, and provide information on counseling concerning sexual abuse.

The FBI’s National Incident-Based Reporting System edition of the UCR defines a sex offense as any sexual act directed against another person, forcibly and/or against that person’s will; or not forcibly or against the person’s will where the victim is incapable of giving consent. Sexual harassment/sexual violence of employees and students at SWCC is defined as any unwelcome sexual advances, request for sexual favors or other verbal or physical conduct of a sexual nature occurs when:

» submission to such conduct is made either explicitly or implicitly a term or condition of an individual’s academic evaluation or employment.

» submission to or rejection of such conduct used as the basis for academic decisions or employment affecting that individual.
acts of domestic violence, dating violence, and/or stalking.

such conduct has the purpose of or effect of unreasonably interfering with an individual's educational experience or work performance or creates an intimidating, hostile or offensive education or work environment.

Any person who believes he/she has been subjected to sexual harassment, sexual violence, sexual misconduct, domestic violence, dating violence, or stalking may report the behavior to the Title IX coordinator, 641.782.1456 or 800.247.4023, ext. 456. Reports may be filed by the alleged victim or others on their behalf. Anonymous reports will be accepted, however, options available to college authorities for investigating or resolving anonymous reports may be limited because of the unique challenges presented.

**Drug-Free Workplace and Campus**

It is the policy of Southwestern Community College to establish a drug-free workplace in accordance with the Drug-Free Workplace Act of 1988 and a drug-free school and campus in accordance with the Drug-Free Schools and Communities Act Amendment of 1989 [Public Law 101-226]. It is the interest and obligation of the college to provide a drug-free, healthy, safe, and secure environment for its staff and students.

The unlawful possession, distribution, dispensation, manufacture, or use of illicit drugs and alcohol by employees and students on college premises, while conducting college business off-campus, or as part of any of its activities is strictly prohibited. A complete description of this policy can be found in the Southwestern Student Handbook.

**Tobacco-Free Campus**

In accordance with House File 2212 (Smoke-Free Air Act), which was enacted by the General Assembly of the State of Iowa and signed by the Governor, Southwestern became a tobacco-free campus on July 1, 2008. The tobacco-free policy prohibits the use of smokeless and smoking tobacco or any type of nonprescription inhalant, as well as any devices that simulate the act of smoking, in all Southwestern buildings, vehicles, and on any college-owned property and 50 feet beyond the perimeter of campus. Student violations of this policy will be treated as violations of the student code of conduct. Students may also be issued a fine by the college for non-compliance. The civil penalty for violating this law is $50. Students interested in smoking cessation programs may contact a wellness professional at Greater Regional Medical Center at 641.782.3518 or seek additional assistance via Web site online: www.quitlineiowa.org.

**Student Right to Know**

Information regarding graduation/completion and transfer-out rates of Southwestern Community College’s general student body and student athletes is updated on an annual basis. This information is on the SWCC Web site or available upon request from the registrar’s office.

**Compliance with Federal and State Laws**

Southwestern Community College will comply with the Federal Student Right-to-Know and Campus Security Act; Public Law No. 101-542 and House File 2028, through annual publication in the Southwestern Student Handbook and the Consumer Information Web page. Both documents are available on SWCC’s Web site. Also published are annual policy statements, crime statistics, and an on-campus housing fire and safety report. Students will receive an electronic copy of the Student Handbook through campus e-mail.

**Limitations of Catalog Information**

This catalog should not be considered a contract between Southwestern Community College and any prospective student. The Board of Directors of Southwestern Community College reserves the right to make changes in graduation requirements, costs, curriculum, course structure and content, the calendar of operations or any other part of the content of the catalog during the life of the catalog and without notice.

**Student’s Responsibility for Catalog Information**

Each student is responsible for being familiar with the information appearing in this catalog. Failure to read the regulations will not be considered an excuse for noncompliance.

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**Buildings/Facilities**

**Administration Center**

The Administration Center houses the office of the president, business office, financial aid, advising, admissions, and registrar’s office, as well as the office of instructional services, economic development, and other related administrative offices.

**Agricultural Site**

The 235-acre Agricultural Site includes classrooms, offices, and a shop area. This site also includes a student-operated agricultural lab and equipment storage facilities.

**Allied Health and Science Center**

The Allied Health and Science Center, which houses the college’s nursing programs, is a state-of-the-art facility with a 12-bed lab room, 110-seat auditorium, computer lab, two private simulation labs, and one debriefing room.

**Instructional Center**

This unique structure of 105,000 square feet houses the majority of classrooms and instructional programs. Also located in this building are the Assessment Center, TRIO-Student Support Services (TRIO-SSS), Iowa Communications Network (ICN) classrooms, Learning Resource Center (LRC), and the Copy Center.

**Parking Facilities**

Parking facilities are available on campus for students and staff. All vehicles used as transportation to the college by students and staff must be registered with the business office. Vehicle regulations are outlined in the Southwestern Student Handbook. Cooperation and consideration on the part of all drivers are needed to keep the parking situation manageable.

No parking is allowed in any area between 10:30 p.m. and 7 a.m., except in the designated “overnight” parking lot east of Technical Center I. Vehicles left on-campus overnight will be towed at the owner’s expense. If a student, staff, or visitor’s vehicle breaks down and must be left overnight, the maintenance department must be notified.
Performing Arts Center
The Area Arts and Wellness Center houses the adult and continuing education division and the YMCA. The Southwestern Community College Performing Arts Center features a performing arts auditorium, multipurpose classroom, and adult and continuing education offices. The YMCA is well-equipped with a gymnasium, Olympic-size pool, walking track, weight room, cardio room, and racquetball courts.

Residence Halls and Other Facilities
Three apartment-style residence halls, Spartan Court, Spartan Hall, and Spartan Suites, and two traditional-style residence halls, Wilson Hall and West Hall, are available for students living on campus.

The traditional residence halls are designed for double occupancy. Each building has a student lounge, and each room is furnished with two beds, dressers, desks and chairs, and closet areas.

Each suite in the apartment-style coed residence halls features four private bedrooms, furnished with a bed, dresser, desk and chair, as well as a closet area. Individual suites also include two bathrooms, a living room and kitchen area with a full-size refrigerator, stove and microwave, and central air conditioning.

Additional amenities include a student lounge with a 60” TV in Spartan Suites; a student lounge with a large-screen TV, game and activity area, vending machines, and social/study area in Spartan Court; a meal card good at the Spartan Café; free YMCA membership; free internet access; cable TV to each room/apartment; and laundry facilities.

The campus includes outdoor facilities for tennis, baseball, softball, basketball, and disc golf, as well as other outdoor recreational activities.

Student Center
The Student Center includes the Spartan Café and the SWCC Shoppe on the upper level. Located on the lower level are a gymnasium, weight room, saunas, and locker and shower facilities.

Technical Centers I and II
Technical Center I houses carpentry and building trades, welding technology, electrical technology, and the Educational Talent Search office (ETS). This building has large, well-equipped shop areas and classrooms. Customized training staff and Iowa Vocational Rehabilitation Services offices are also located in Technical Center I.

Technical Center II is an 8,000 square-foot facility that sits adjacent to Technical Center I. It is the home for the information technology systems networking and industrial maintenance technology programs.

Adult and Continuing Education
Adult and continuing education offers opportunities for training and retraining, upgrading skills, gaining new knowledge, and enjoying the excitement of learning. Lifelong learning opportunities are available throughout the college district. The adult and continuing education division meets continuing education needs by providing diverse offerings through cooperative efforts and partnerships with industries, agencies, hospitals, local school districts, and businesses. Fees assessed to students will vary according to the program and length of instruction.

Adult Literacy Programs
Adult Basic Education (ABE) offers assistance to adults who are interested in basic skills improvement including job-related and life-coping skills, reading, writing, math, and English. Class time may vary according to student needs; but generally, classes meet twice a week for two or three hour sessions. The groups are small and informal, and each student studies at his/her own pace. Comprehensive Adult Student Assessment System (CASAS) basic skills certificates are used to document the learning process.

English Literacy (EL) classes of instruction are designed to help adults, who are limited English proficient, achieve competence in the English language. Classes meet twice a week at various sites within Southwestern’s district.

Workplace Education offers adults a chance to develop reading, writing, math, communication, critical thinking, problem solving, and English language skills. These skills are needed to be able to meet the demands of today’s quickly changing work environment. These programs are set up on an as needed basis and are customized to meet employees’ needs.

Family Literacy programs enable families to learn together and help improve literacy. Southwestern is a literacy partner with agencies, organizations, and businesses to provide the adult education component for family literacy projects.

High School Equivalency Preparation
classes offer review in the areas covered on the High School Equivalency Tests. This testing program enables adults who did not complete high school to take a series of tests to demonstrate academic achievement. Upon successful completion of the test, adults are eligible to receive the Iowa High School Equivalency Diploma (HSED) issued by the Iowa Department of Education.

High school equivalency preparation classes are located at various sites within the eight counties Southwestern serves.

A testing and diploma fee is required for the battery of tests. A student must meet certain requirements if he/she is less than 18 years of age. Transcripts are available through Diploma Sender for a fee.

Career and Technical Training
Credit or non-credit courses and short term training programs designed for those who desire to upgrade their skills or those who are training for a new career.

Health Services and Allied Health - Programs in health service occupations prepare individuals for either entry into specialized training programs or a variety of concentrations in allied health areas. This instruction includes basic sciences, research and clinical procedures, and aspects of the subject matter related to various health occupations. This includes state-approved Emergency Medical Services training courses at the Emergency Medical Responder, Emergency Medical Technician, and Advanced Emergency Medical Technician levels. Instructional programs that prepare individuals to practice as healthcare professionals and assistants may include nurse aide, medication aide, resident attendant and medication manager training, and limited practice radiography. Southwestern Community College is designated an American Heart Association Training Center. Blood borne pathogens and all levels of CPR and first aid are available.

Fire Science - Courses are available for individuals pursuing fire careers in either a professional or volunteer capacity. Firefighter I and Firefighter II courses are offered for preparation in taking the state certifying examination. Continuing education in a variety
of fire science areas is offered to trained rescuers to assist them with furthering their knowledge in a variety of areas including rope rescue, live burn simulations, vehicle extrication, ice rescue, and other classroom and hands-on learning environments.

Institutional Food Service Training - Training programs offered for individuals who desire careers in the dietary departments of long-term care facilities and/or hospitals.

Transportation and Industry - We offer courses for individuals to earn their Class A CDL or obtain a certificate in industrial welding. There is a growing need for skilled workers in our area in both fields. Additional programs being developed will enable individuals to obtain a job in other fields that are seeing a shortage of skilled workers.

Computer and Technology Education - Classes are offered in the main campus and satellite centers. Whether an adult wants to upgrade or learn new computer skills for a job or personal use, Southwestern offers a wide range of computer technology training opportunities.

For other career training opportunities, call 641.782.1449 or 641.782.1441.

Community Education
Courses are offered for gaining knowledge and/or understanding valuable skills used throughout life to enhance functioning in society. Courses are also offered in the areas of leisure and recreational, casual culture, wellness, and self-enjoyment.

Customized Training
Special courses and programs may be developed and presented in-plant or off-site to meet the unique needs of a particular industry or business. Workshops, seminars, and classes can be offered for employees at any level. Topics range from business communications to customized computer training to health and safety. Representatives of business and industry within the college district are invited to contact adult and continuing education staff to discuss training needs.

Employability and Academic Success
Courses are designed for the specific purposes of upgrading the skills of persons seeking employment, presently employed, and retraining for new employment. Courses are also available for the advancement of knowledge in traditional educational studies, such as math, science, literature, and history for the purpose of preparing for college or career.

Family and Individual Development and Health
Courses are offered to help individuals learn how best to function in family, work, and community settings and how they relate to their physical, social, emotional, and intellectual environments. Examples of development include interpersonal relationships, parenthood education, child and adolescent psychology, and family resource management. Examples of health include childbirth education, substance abuse prevention, disease management and prevention, and adjustment to disability and hearing impairments.

GAP Tuition Assistance/Pathways for Academic Career Employment
GAP Tuition Assistance provides tuition assistance to eligible applicants enrolling in GAP approved adult and continuing education certificate programs. GAP Tuition Assistance enables individuals to gain necessary skills to obtain jobs in high-demand fields at no cost.

Pathways for Academic Career Employment (PACE) provides a pathway navigator who assists participants in identifying potential barriers to success and minimizes obstacles by connecting students to appropriate resources. These programs combined enable students to access funding for training and provide extra support services to successfully complete their program.

Mandatory Continuing Education
Southwestern Community College offers courses and programs mandated, recognized, and/or court ordered by state or federal guidelines. Some offerings are organized educational instruction designed to meet legislated or licensing requirements as defined in the Code of Iowa.

Non-Credit Online Courses
Here is an opportunity to learn from home. Non-credit online courses offer a wide range of topics including computer programming, Internet basics, software applications, test preparation, writing, personal enrichment, business/entrepreneur, and business administration/management. More than 100 courses are available. Online Career Certificate programs are offered in the areas of medical transcription, medical terminology, administrative medical assistant, billing and coding, pharmacy technician, graphic design, HVAC technician, Web master, and Web site design.

Recertification and Relicensure Continuing Education
Programs have been designed for individuals employed in occupations that require less than a four-year degree and who are required to be recertified or relicensed. Programs have also been designed for individuals employed in occupations that require a four-year college degree or above and are required to be recertified or relicensed.

Continuing education is documented by the granting of Continuing Education Units (CEUs) and Continuing Education Hours (CEHs). CEUs and CEHs are earned through participation in organized non-credit or credit activities. The college cooperates with the various licensing certification boards to assure offerings meet state requirements.

Small Business Education
Classes and workshops are offered for taxes, accounting software, business planning, basic accounting, business and financial management, and computers. These classes are collaborative efforts between adult and continuing education and Iowa Small Business Development Centers.

Early Childhood Education & Parents as Teachers
The Early Childhood Education/Parents as Teachers (ECE/PAT) program’s mission is to support, educate, empower and inspire early care & education professionals and families to foster success in young children.

Current projects supporting this mission:
Parents as Teachers - A model Parents as Teachers program serving Union, Adams, and Adair counties. PAT is an evidenced based program, which supports families in gaining child development, parenting and goal-setting support through voluntary in-home visits and opportunities for connections with other families.

Leadership Development/7 Habits Group
- All center directors, Head Start coordinators/administrators, and other ECE community partner/leaders are invited to participate in a monthly book study/leadership development/networking meeting. Leaders set goals and take a turn facilitating and hosting the meetings.
Fall Early Childhood Conference at SWCC
- Cosponsored with the Green Valley Chapter of Iowa Association for the Education of Young Children. Generally held the first Saturday of November. The conference prides itself in bringing in national speaker/ECE leaders to inspire early childhood professionals in the SWCC area. Family childcare providers, center-based teachers, administrators and parent educators attend.

CSWVPC - A collaboration between Creston Community Schools, SWCC, Green Hills AEA, MATURA Head Start and local preschool programs to provide a quality preschool experience for all four-year-olds in Creston and Prescott school districts. The program provides professional support and administration to maintain state mandated requirements and is a communication gatekeeper between Creston and its partners.

For more information on any ECE/PAT program, call 641.782.1308.

Economic Development Services
The Southwestern Community College Economic Development staff works with businesses and communities to enhance the economic development of the region by identifying training monies and providing training services that will attract new business and industry or expansion of existing business. Area businesses and industries are provided opportunities to improve productivity through customized training. Through these services, local citizens, government, and education are brought together in a commitment to productivity, profitability, and quality work force.

Education Foundation
The Southwestern Education Foundation is a non-profit corporation established to raise funds to support the College in ways that are not supported by taxes, tuitions, or grants. The major focus of the Foundation is to support student scholarships and other institutional needs. The Foundation receives all tax deductible gifts, trusts, and memorials made to the College.

Red Oak Center
2300 North 4th Street
Red Oak, IA 51566

Off-Campus Centers
Southwestern Community College has off-campus centers located in Osceola and Red Oak for the convenience of students and communities in the merged area. The centers offer academic courses, as well as adult and continuing education services. In addition to on-site classes, distance-learning opportunities are available through the Iowa Communications Network (ICN), videoconferencing, and the Iowa Community College Online Consortium (ICCOC).

Osceola Center
Southwestern established the Osceola Center in 1992, originally located in a store front near the town square. The current location is just west of the Interstate 35 and Highway 34 intersection. In April of 2000, an extensive remodeling project was completed to better accommodate student needs. The Osceola Center offers credit courses, adult and continuing education courses, HSED and English language learning classes.

High school students benefit from concurrent enrollment courses offered at the high schools, at the center, and online. High school Career Academy courses in Osceola include carpentry and health.

Osceola Center
2520 College Drive
Osceola, IA 50213

Red Oak Center
The Red Oak Center opened in 1985 to fill a growing need to serve the Montgomery County area of the Southwestern Community College district. In 1992, the center moved to 2300 North 4th Street off U.S. Highway 34. The college completed a remodeling project at the Red Oak Center in 2008 to better accommodate student needs.

The center provides courses in college transfer and career and technical education. Adult and continuing education, HSED, and customized training for local businesses and industries. Courses are available for high school students through the health Career Academy.
Student Information

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Admission Policy for Credit Programs

Southwestern Community College maintains a liberal policy of admission for all students. Every student must complete a formal college application to be considered for admission to the college.

The student must meet at least one of the following requirements: graduation from an accredited high school, successful completion of the Iowa High School Equivalency Diploma (HSED) scores (formerly known as the GED), or home schooling documentation to the admissions office. All transcripts and other documentation must be translated into English prior to submission.

Admission to the college does not ensure admission to all programs offered. Admission to specific programs is granted only after all admission requirements have been completed.

The college reserves the right to assist in the placement of students in specific programs based on information gathered through assessment, previous educational achievement, and pre-enrollment advising.

The college establishes the maximum number of students who can enroll in specific programs. Once a program becomes filled, those students who have applied for admission to that particular program will be placed on a program waiting list. If a vacancy occurs, the first person listed will be contacted to fill the opening, with the exception of nursing.

The college reserves the right to evaluate requests for admission, when deemed to be in the best interest of the student and/or the college. Individuals applying for admission to the college are expected to conduct themselves in an appropriate manner consistent with the expectations outlined under the Student Code of Conduct in the Southwestern Student Handbook. Failure to do so may result in a denial of admission. The college has the right to establish admission requirements that are higher than the basic policy.

Admission materials are to be submitted to:

Admissions Office, Southwestern Community College, 1501 West Townline Street, Creston, IA 50801.

Application Procedures

A. Application for Admission - Submit a completed application for admission online or by mail to the admissions office.

B. High School Transcripts - Submit a copy of the student's final high school transcripts, High School Equivalency Diploma (HSED) scores (formerly known as the GED), or home schooling documentation to the admissions office. All transcripts and other documentation must be translated into English prior to submission.

C. College Transcripts - If the student has attended other colleges or universities, an official transcript from each college or university attended must be submitted. A transcript is official only when it arrives directly from the previous institution. This is required even if the student does not wish to have previous college work evaluated or transferred to Southwestern. All transcripts and other documentation must be translated into English prior to submission.

D. Entrance Tests - In recognition of the varying skill levels of entering students, Southwestern Community College uses the ACT, ACCUPLACER, and SAT tests. Results from these tests are used as placement guides, which enable advisors to better advise students with course selection and scheduling. Test scores must be on file with admissions prior to registration. See Assessment Center section for specific information.

The ACCUPLACER test is given in the Assessment Center, Room 215, of the Instructional Center by appointment or it can also be taken at the Red Oak and Osceola Centers. An appointment to test can be scheduled by calling 641.782.1320. In lieu of the ACCUPLACER test, Southwestern will accept the following from students:

» A documented composite score of 19 on the ACT or an equivalent SAT score of 1350 (combined reading, writing, and math) or above.

» Documented scores on the COMPASS or ACCUPLACER test taken within the past three years at Southwestern or elsewhere.

» Successful college work within the past three years consisting of a minimum of 12 credits with a “C” grade or better in each class, including three credits in English and three credits in math.

The primary purpose of assessment is to help enhance student success at Southwestern. Assessment results will enable the college to improve academic advising and course placement. Areas measured by the ACCUPLACER test include reading skills, numerical skills, and language usage skills.

E. Other - Completion of any other program or course prerequisites for the specific program for which application has been made.

High School Students

Through Senior Year Plus (SYP), Iowa high school students are provided with a variety of mechanisms to enroll in college coursework, including courses delivered through sharing agreements between local school districts and Southwestern (concurrent enrollment) and Postsecondary Enrollment Option (PSEO). In both of these forms, students earn both high school and college credit for the course and enrollment in the college course generates an official college transcript for each student where grades, withdrawals, etc. are recorded.

All high school students must follow eligibility requirements outlined in Iowa Code under Senior Year Plus including:

» Students must meet proficiency requirements as evidenced by standardized tests or alternative measure of proficiency as approved by the Iowa Department of Education and the local school board of education.

Concurrent Enrollment

In order for students to participate in concurrent enrollment opportunities through Southwestern, the local school district must approve courses (arts & sciences and career academy) through an educational services contract with Southwestern. The program allows ninth through 12th grade students to enroll in contracted coursework, with the school district paying any tuition and fees.

To enroll in a concurrent course, a student must:

» Visit with his/her high school counselor as the first point of contact. The counselor assures the student has met the proper prerequisites as outlined in SYP legislation and by Southwestern.

» Complete the Southwestern application for admission (available online).
Submit the Southwestern high school registration form (available at the student’s local high school guidance counselor’s office or online).

Complete an ACCUPLACER test or submit a documented ACT composite score of 19 or above or COMPASS scores taken within the past three years.

Receive approval from the Southwestern secondary programs coordinator for course selection and registration.

Post Secondary Enrollment Option (PSEO)
The program allows 11th and 12th grade students, as well as ninth and 10th grade students identified as gifted and talented by their local district, to enroll in college courses. Through the program, individual students may enroll in an eligible postsecondary course if a compatible course is not offered at their school.

The school district pays the eligible postsecondary institution for the cost of the course or $250, whichever is lower. If the student successfully completes the course, it is provided free to the student (except possible equipment purchases). If a student fails to complete the course and is not eligible for a waiver, the student or his/her parent or guardian may be required to reimburse the district’s cost.

To enroll in PSEO courses, a student must:

» Visit with his/her high school counselor as the first point of contact. The counselor assures the student has met the proper prerequisites as outlined in SYP legislation and by Southwestern and verifies the high school does not offer a comparable course.

» Complete the Southwestern application for admission (available online).

» Submit the Southwestern high school registration form (available at the student’s local high school guidance counselor’s office or online).

» Complete an ACCUPLACER test or submit a documented ACT composite score of 19 or above or COMPASS scores taken within the last three years.

» Receive approval from the Southwestern secondary programs coordinator for course selection and registration.

It is important to note high school students taking Southwestern classes are subject to the same policies as any other Southwestern student.

Students must also meet all prerequisite requirements including placement test scores and/or course prerequisites as outlined in the Southwestern college catalog.

Articulation Agreements
Through the articulation process between high schools and the college, students may receive tuition-free college credits (upon successful completion of eligible coursework) to be used toward graduation from high school. The credits will also begin their college transcript and may be used toward a college diploma or degree. Articulated courses have been identified to have college-level material and are located within career and technical education fields of study.

Southwestern’s faculty have met with high school teachers to compare course offerings and then develop courses accordingly. Articulation is a savings of time and financial resources for the student interested in a time-shortened degree or increased competence and employment potential for the student interested in an advanced skills degree. High school guidance counselor(s) should be contacted for a listing of courses currently qualifying for articulation with Southwestern Community College.

Home Schooled Students
Home schooled student applicants requesting admission must:

» Submit a completed application for admission to the admissions office.

» Submit proof of successful completion of home schooling requirements/curriculum with the Southwestern Community College Home School Proof of Completion form.

» Submit verification letter from someone other than a family member (i.e. mentor, tutor, librarian, etc.)

» Complete an ACCUPLACER test or submit a documented ACT composite score of 19 or above or COMPASS scores taken within the last three years.

» Meet with an academic advisor from the college prior to registration.

English Proficiency
All applicants whose first language is not English will be required to submit evidence of English proficiency by completing a Proof of English Proficiency Form.

International Students
A student from a country other than the United States must, in addition to all regular college and program requirements, complete the following:

A. Complete the international application for admission online.

B. Submit a $75 international student processing fee.

C. Submit official records of attendance and transcripts for all schools, English language programs, and colleges attended.

D. Submit Proof of English Proficiency Form – show evidence of English proficiency required by the college. The student must also submit:

» TOEFL (Test of English as a Foreign Language) Exam by achieving a minimum score of 61 on the Internet-based test, 173 on the computer-based test, or 500 on the paper-based test; or

» IELTS (International English Language Testing System) academic module score of 6; or

» Successful completion of freshman level English at an approved U.S. college or university.

E. Submit ACCUPLACER test scores or a documented ACT composite score of 19 or an equivalent SAT score of 990 if test is taken after 10/1/2016 or 1350 if taken prior to the above date or COMPASS scores taken within the past three years. All students are required to test prior to registration and have test scores on file with the admissions office.

F. Complete Student Financial Statement – show evidence of ability to meet all educational and living expenses, while attending Southwestern Community College. The student, family member, or sponsor is required to show financial support of approximately $13,374 (USD) for the period of one year.

After completing these procedures, the college will issue an I-20 which is a Certificate of Eligibility for non-immigrant (F-1) form through the U.S. Department of Immigration and Customs Enforcement utilizing the Student and Exchange Visitor Information System (SEVIS). The student presents the I-20 form, I-901 fee payment receipt, and financial documentation to the United States Consular Office in the country
Visiting Students
A student who is regularly enrolled at another college or university and wants to take a course(s) at Southwestern to immediately transfer back to his/her home college may be accepted as a visiting student at Southwestern. A visiting student may also be an individual who wants to take a course(s) for personal or professional development and is not seeking a degree. The visiting student does not need to submit transcripts. If the student wants to take a math or English course, the student must submit official ACT, SAT, ACCUPLACER, or COMPASS test scores. A visiting student may not enroll in more than 10 credits per term. The student must submit an application for admission and indicate he/she is a visiting student.

Transfer Students
Students who wish to transfer from another college/university are eligible to apply for admission with advanced standing. Students transferring to Southwestern from other institutions will have their credits evaluated on an individual basis. Transfer credits will be considered only when earned at an institution accredited by regional accreditation associations, such as the Higher Learning Commission. All transfer students are advised to consult with the admissions office well in advance of the beginning of each term so that transfer status may be established. Credit will be granted for courses taken at other accredited institutions in which the student earned a grade of “C” (2.00 on a 4.00 scale) or better. Credit will only be awarded for courses in which a grade of “D” has been earned, providing the student’s overall grade point average from the transferring institution is “C” (2.00 on a 4.00 scale) or better. Credit is only awarded with no impact on the GPA. Grades of “D” will not be accepted for any required courses in the nursing education program. Military credit will be granted according to guidelines published by the American Council of Education (ACE). No more than 16 semester hours of credit, which is termed vocational by the ACE, may be used as electives towards the Associate of Arts and Associate of Science degrees. Students must complete at Southwestern a minimum of one-third of the credits applicable to the degree being pursued. Transfer students enrolling in classes will be required to take the ACCUPLACER test or have on file an ACT composite score of 19 or higher, a SAT composite score of 990 (if test is taken after 10/1/2016 or 1350 if taken before 10/1/2016), COMPASS scores taken within the past three years, or to have successful college work within the past three years consisting of a minimum of 12 credits with a “C” grade or better in each class, including three credits in English and three credits in math.

The College Experience
The College Experience is a one credit course designed to help students develop academic success skills by connecting students to college resources and facilitating participation in college culture. Activities include study and classroom performance strategies, personal exploration and development, academic and career planning, and exploring the college experience.

Admission Policy for Acceptance of Career and Technical Education Credit Toward Associate Degrees
Southwestern Community College accepts career and technical education credits that can be applied toward associate degrees. The following explains the usage of associate of applied science degree/ diploma credits:

A. All career and technical education credits earned in resident coursework will be accepted; however, only 16 career and technical education credits will be applicable toward the Associate of Arts (AA) or Associate of Science (AS) degrees. They may not be used to satisfy core or general education requirements.

B. Any variation of these provisions in relation to transfer from another accredited Iowa community college of career and technical education credits acceptable toward Southwestern’s Associate of Arts or Associate of Science degrees will be decided in accordance with the other community college’s internal articulation policy provided that:

1. A statement of that community college’s policy on internal articulation of career and technical education credits toward their own Associate of Arts and Associate of Science degrees is on file with the admissions office at Southwestern.

2. The sending community college’s transcript clearly indicates which career and technical education courses are acceptable toward their Associate of Arts or Associate of Science degrees.

The following explains the general procedures in order for a student to use career and technical education credits toward an Associate of Arts or Associate of Science degree:

A. A student must apply through the registrar’s office for evaluation of career and technical education credits for acceptance toward an Associate of Arts or Associate of Science degree.

B. A student must complete the required general education courses to receive the Associate of Arts or Associate of Science degree.

C. A student must still meet all requirements as specified in the Southwestern catalog. A combined total of 16 career and technical education credits may be applied toward the AA or AS degree. If a student has earned more than 16, the most recent credits will be used.

D. A student must earn a minimum cumulative grade point average of 2.00 in all coursework applied toward the degree sought.

E. A student should understand that transferability to another institution is dependent upon the institution’s policy. Each student should communicate with the institution to which he/she plans to transfer as to transferability of credit.

Residency
General
A person who has been admitted to Southwestern Community College shall be classified as a resident or non-resident for admission, tuition, and fee purposes. A person classified as a resident shall pay resident tuition costs. A person classified as a non-resident shall pay non-resident tuition costs.
Determination of Residency Status
In determining a resident or non-resident classification, the primary determination is the reason a person is in the state of Iowa. The second determination will be the length of time a person has resided in Iowa. If a student is in the state primarily for educational purposes, that person will be considered a non-resident. The burden of establishing the reason a person is in Iowa for other than educational purposes rests with the student. Some of the various types of acceptable documentation to claim residency status are written and notarized documentation from an employer that the student is employed in Iowa or a signed and notarized statement from the student describing employment and sources of support, an Iowa state income tax return, an Iowa driver’s license, an Iowa vehicle registration card, and Iowa voter registration card or proof of Iowa Homestead credit on property taxes. In all events to be determined a resident of Iowa, the individual must document residing in the state of Iowa for at least 90 days prior to the beginning of the term for which he/she is enrolling. A student will be required to file at least two documents to determine his/her residency status. No two documents may come from the same source. The following are examples of acceptable documentation.

» Written and notarized documentation from an employer that the student is employed in Iowa or a signed and notarized statement from the student describing employment and sources of support.

» Iowa state income tax return.

» An Iowa driver’s license.

» An Iowa vehicle registration card.

» In Iowa voter registration card.

» Proof of Iowa Homestead credit on property taxes.

If a student gives misleading or incorrect information for the purpose of evading payment of non-resident fees, he or she must pay the non-resident fees for each term the student was not officially classified as a non-resident. These regulations shall be administered by the registrar or office staff designated by the community college. Resident and non-resident tuition rates shall be printed and available in the catalog or another major college publication.

Residency of Minor Students
The domicile of a minor shall follow that of the parent with whom the minor resides except where emancipation of said minor can be proven. The word “parent” herein used shall include legal guardian or others in cases where the lawful custody of a minor has been awarded to persons other than actual parents.

A minor living with a resident of Iowa who is legally responsible for the minor shall be granted resident status if the minor has lived with the Iowa resident for at least 90 days immediately prior to enrollment. The residency status of an emancipated minor shall be based upon the same qualifications established for a person having attained majority.

Residency of Adult Students
A person who reaches the age of majority, while his/her parents were residents of the state, shall be classified as a resident. A person who is married under the age of 18 shall be classified as a resident, if the person’s parents were residents of the state at the time such person was married and the person is not domiciled in another state.

A person who has reached the age of majority shall be classified as a resident, if the person has established a domicile within the state of Iowa at least 90 days prior to the opening day of the academic term for which the person enrolls.

Residency of Students Who Are Not Citizens of the United States
A person who is a refugee or who is granted asylum by an appropriate agency of the United States must provide proof of certification of refugee or asylum grantee status. A person may be accorded resident status for admission and tuition purposes when the person comes directly, or within a reasonable time, to the state of Iowa from a refugee facility or port of debarkation and has not established domicile in another state.

A person who has immigrant status and his or her spouse or dependents, may establish Iowa residency in the same manner as a United States citizen.

A person who has non-immigrant status and who holds a non-student visa, and his or her spouse or dependents, may establish residency in the same manner as a United States citizen. An alien who has non-immigrant status and whose primary purpose for being in Iowa is educational is classified as non-resident. A “student visa” is prima facie evidence of non-residency, i.e., in a rare case, a student holding the visa could overcome the presumption of non-residency.

Residency of Federal Personnel and Dependents
A person and his/her spouse, who has moved into the state of Iowa as the result of military or civil orders from the federal government, and the minor children of such persons, are entitled to immediate Iowa residency status.

Veterans Exemption
All veterans of military service will be granted in-state tuition.

Reclassification of Residency Status
It is the responsibility of a student to request a reclassification of residency status. If a student is reclassified as a resident for tuition purposes, such classification shall be effective beginning with the next term for which the student enroll. In no case shall reclassification to residency status be made retroactive for tuition and fee purposes, even though the student could have previously qualified for residency status had the student applied. Students may make application for reclassification of residency through the registrar’s office, Administration Center.

Appeal
The decision of the residency status of a student for admission, tuition, and fee purposes may be appealed to the Academic Review Committee. If the matter is not resolved at this point, a student may submit a written appeal within five (5) days to the dean of student services. The facts will be reviewed to determine if the student’s due process was protected and then render a final decision.

Assessment Services
Students, potential students, and others are offered opportunities for evaluative services in the assessment center. A variety of academic and vocational assessments are available on request, enabling examinees to clarify interests and abilities. Referrals are accepted from Iowa Vocational Rehabilitation Services, Workforce Investment Act (WIA) personnel, private industry, and other agencies.
Entrance Testing
All students enrolling full-time at Southwestern Community College in arts and sciences or career and technical education programs are required to take the ACCUPLACER test prior to registration. Please refer to the nursing section for additional nursing testing requirements. In addition, any student enrolling for his/her seventh credit or enrolling for a math or English class must test. All high school students are required to have test scores on file prior to registration.

In lieu of the ACCUPLACER test, Southwestern will accept the following.

» A documented composite score of 19 or above on the ACT or an equivalent SAT composite score of 990 when taken after 10/1/2016 or 1350 when taken prior to that date.

» Successful college work within the past three years consisting of a minimum of 12 credits with a “C” grade or better in each, including three credits in English and three credits in math.

Students entering the LPN or ADN programs are required to take the ACCUPLACER or ACT test. COMPASS scores will be accepted if taken within the past three years.

The ACCUPLACER test is a computerized adaptive test for placement, advising, and diagnostic purposes. The ACCUPLACER test measures skill levels in reading, writing, and mathematics. The test is an untimed assessment customized to meet Southwestern’s needs.

Documented scores on the ACCUPLACER test are good for three years. An exam must be taken within three years from the date of enrollment. Testing may be done at Southwestern or with another accredited college. It is the responsibility of each student to see that necessary documentation is on file with the admissions office prior to registration.

The ACCUPLACER test is administered free of charge the first time it is taken. Retakes are administered at a fee of $5 per individual test. A $10 fee and written request are required to have scores sent to another institution.

ACCUPLACER tests are given by appointment on the Creston campus and at the Red Oak and Osceola Centers. To schedule an appointment, contact the appropriate campus or center directly: Assessment Center, Creston campus 641.782.1320, Osceola Center 641.342.3531, and Red Oak Center 712.623.2541.

If the campus or center is closed for any reason on a testing date, testing will not take place.

Any student needing accommodations in order to test must contact the Southwestern assessment coordinator located on the Creston campus and make arrangements prior to testing, 641.782.1330.

CLEP/DSST (College Level Examination Program/DANTES Subject Standardization Test) Credits
The Assessment Center is a national test center for CLEP and DSST Examinations. The programs, sponsored by the College Board and the Educational Testing Service, offer subject examinations that correspond to specific college courses. The examinations are administered by appointment.

A. Southwestern Community College will award credit based on scores obtained on CLEP/DSST subject examinations.

B. CLEP/DSST credits will be recorded on academic transcripts for a $15 recording fee. The type of exam will be noted on the transcript.

C. CLEP/DSST credits will not be granted for duplicate credits of courses already taken, for a course which the student does not meet the stated prerequisites listed in the college catalog or for a course which is a prerequisite for which credit has previously been earned.

D. A maximum of 30 credits will be allowed for CLEP/DSST Exams.

E. For CLEP/DSST Exams, the Accelerated Career Education (ACE) score recommendations will be followed for credit award.

F. A minimum of 12 credits of college credit must be earned at Southwestern Community College before CLEP/DSST credit may be applied to the permanent record.

G. Credit earned through CLEP/DSST will not be given grades nor will it be considered in determining grade point average.

For further information, contact the Assessment Center.

Advanced Placement Tests
Southwestern Community College will accept results of Advanced Placement (AP) Examinations. A minimum score of three will be required for issuing credit. AP credit will be recorded on academic transcripts for appropriate recording fees after 12 college credits are earned at Southwestern. Credit will not be granted if it duplicates credit for courses already taken. AP credit will not be given grades nor will it be considered in determining grade point average.

Credit for Prior Learning
Southwestern Community College recognizes that individuals involved in various aspects of life have already acquired learning of a measurable, college-level dimension beyond a traditional classroom setting, which can be assessed legitimately and recognized as part of a degree program.

Such learning, frequently called prior learning, may result from employment/work experience, professional certification, non-credit courses, hobbies, volunteer experience, civic activities, or military or other experiences. The assessment of prior learning is primarily for students who have been out of school for several years and who are entering or returning to Southwestern to earn an associate of applied science degree.

Credit for Prior Learning (CPL) is a process by which an individual’s learning, from experience that is equivalent to college-level coursework, is assessed and evaluated for purposes of granting college credit, certification, or advanced standing toward further education or training.

Credit for prior learning can be awarded only after the assessment of prior learning experiences and only for documented learning that demonstrates achievement of all identified learning outcomes for a specific college credit course or courses.

To be eligible for CPL, the student must be currently enrolled and in good standing at Southwestern or be eligible for re-admission to the college.

A maximum of 30 credits of degree requirements can be satisfied by receiving academic credit through CPL. For non-transferable degree programs (e.g., associate of applied science), the maximum credits that may be satisfied through CPL may vary. Students must complete the final 15 credits at Southwestern Community College.

To initiate CPL, students must complete the following steps:
Evaluation of certification licensures: Student must make an appointment with the designated faculty member, establish proof of identity, complete the CPL request form, and pay the required fees prior to evaluation. The faculty member and student will then arrange a time for the student to complete the assessment.

Challenge examination: Student must make an appointment with the designated faculty member, establish proof of identity, complete the CPL request form, and pay the required fees prior to testing. The faculty member and student will then arrange a time for the student to complete the assessment.

Portfolio evaluation: Student must make an appointment with the designated faculty member, establish proof of identity, complete the CPL form, pay the required administrative fee, complete the CPL portfolio evaluation rubric (including supporting documentation), and submit the portfolio to the respective faculty member for evaluation.

An assessment fee is charged upon submission of the CPL request form to the registrar. Southwestern will follow the CPL fee structure as outlined below:

» For a faculty evaluation of national certification/licensure exams, an assessment fee of $25 will be charged.

» The fee for a challenge exam will be $75 per course for a paper- or computer-based exam or $100 per course for a practical (hands-on) exam.

» The fee for portfolio evaluation is a $100 administrative fee.

» In addition, a CPL credit hour fee (25 percent of prevailing tuition) will be charged.

» CPL fees cover administrative and assessment costs incurred by the college and are not for “purchase of credit;” therefore, fees are nonrefundable if any petition for credit is denied.

After assessment or evaluation, the student will receive notification by the student’s Southwestern e-mail account indicating the assessment results. If credit is awarded, it will be designated under the heading of “Credit by Examination.” The transcript will designate the course title, number of credits awarded, and the designation “CR” for credit. Grades are not recorded when credits are earned through CPL nor is a student’s grade point average affected.

Students who are not granted credit through CPL for a specific course may not petition for credit again by the options defined under CPL. A student also may not receive credit twice for a course that has been awarded through CPL.

If a student is denied credit, the student can appeal the decision by following the grade appeal process as outlined in the student handbook.

**Credit for Non-Credit Coursework**

Students may request that credit appear on their transcripts for non-credit curriculum that has been approved as a credit course. The credit non-coursework must be documented and comparable to the approved curriculum for the credit course.

To be eligible, the student must be currently enrolled and in good-standing at Southwestern or be eligible for re-admission to the college.

» All credit must be awarded prior to the student’s last semester of enrollment. Credit does not count toward the residency requirement of the college nor does financial aid cover non-credit to credit fee expenses.

» A maximum of 16 credits of non-credit to credit transfer may be used to satisfy elective degree requirements in the Associate of Arts and Associate of Science degree programs. In the Associate of Applied Science and the Associate of General Studies degree programs, a maximum of 30 credits may be satisfied through non-credit to credit transfer. Students must complete the final 15 credits at Southwestern Community College.

» Southwestern does not guarantee that another college or university will accept non-credit to credit transfer. Students interested in transferring to another college should check with that institution about their transfer policies.

To initiate non-credit to credit transfer process, students must complete the following steps:

» Student must make an appointment with the vice president of instruction or his/her designee, establish proof of identity, complete the Non-Credit to Credit Transfer Request Form, and pay the required fees prior to evaluation.

The student also must present written confirmation of satisfactory completion from the instructor of and/or agency presenting the non-credit course to the vice president of instruction or his/her designee.

The written confirmation (eg. course outline or syllabus) is presented to the Curriculum Committee for review. The curriculum of the non-credit course must be documented and comparable to the approved course, as evaluated by the Curriculum Committee.

If documentation of a national certification/licensure exam is presented, this will be evaluated through the Credit for Prior Learning process.

An assessment fee is charged upon submission of the Non-Credit to Credit Request Form to the registrar. Southwestern will follow the fee structure as outlined below:

» A credit hour fee of 25 percent of prevailing tuition will be charged.

» The fees outlined above cover administrative and evaluation costs incurred by the college and are not for “purchase of credit;” therefore, fees are nonrefundable if any petition for credit is denied.

After assessment or evaluation, the student will receive notification by the student’s Southwestern e-mail account indicating the assessment results. If credit is awarded, it will be designated under the heading of “Credit by Examination.” The transcript will designate the course title, number of credits awarded, and the designation “CR” for credit. Grades are not recorded when credits are earned through non-credit to credit transfer nor is a student’s grade point average affected.

Students who are not granted credit for a specific course may not petition for credit again by the options defined under this policy. A student also may not receive credit twice for a course that has been awarded through the non-credit to credit conversion process.

If a student is denied credit, the student can appeal the decision by following the Grade Appeal process as outlined in the Student Handbook.

**Additional Assessments**
Southwestern is a test site for Pearson VUE exams, Iowa Pesticide certification, Iowa Dental Board exams, and numerous career assessments. For additional information or an assessment appointment, call 641.782.1330.

Registration and Academic Policies

Change of Personal Information
If a student changes a local or permanent address, his/her name, major, telephone number, e-mail address or any other information, it is the student’s responsibility to report such changes to the registrar’s office. He or she may update that information online by updating his/her demographic information on Student CampusConnect.

Registration
Registration includes securing official approval of the schedule of classes and meeting tuition and fee payment obligations. Registration should be completed prior to or on designated registration dates at the beginning of each term. Registration should always be preceded by a careful study of one’s curricular needs regarding the course or program offerings available. The registration process should include a conference with a faculty advisor and/or staff advisor. Students are urged to arrange for early conferences in planning for any future terms. Advisors are available during the summer months. As part of registration and/or class placement, specific testing may be required.

Advising
All arts and sciences students will be assigned a faculty advisor in accordance with their chosen majors. Career and technical education faculty serve as advisors to students in their programs. It is the student’s responsibility to be informed about the requirements for his or her degree/diploma and to ensure that these requirements are met.

Academic advising is an essential element of the student’s educational experience. It is a process through which the student can do any of the following:

» Make appropriate course selections each semester.

» Discuss general education requirements and academic progress.

» Discuss any problems which may affect academic performance.

» Add or drop a course.

» Check on graduation requirements and obtain transfer information.

» Discuss career considerations.

It is the student’s responsibility to contact his/her advisor at least two to three times each semester. Two specific times would be at mid-term to discuss his/her grades and academic progress, then again when it is time to pre-register for the next semester’s classes. Students should become familiar with their advisor’s office hours and make an appointment if they wish to speak to their advisor.

Cancellation of Courses
The college reserves the right to cancel, reschedule, or alter the meeting times of any course. Students must follow the drop/add procedure to add another course or section to replace the canceled section.

Change in Schedule - Adding or Dropping Courses
A student who wishes to add or drop courses or withdraw totally from college must initiate this action in the registrar’s office. It is suggested that a student attend a class at least one time before initiating a drop.

Courses may be added at the beginning of each semester during the first week of classes. The deadline for adding courses is 4 PM the fifth day of classes. In unusual circumstances, classes may be added after the deadline with approval of the instructor through the 10th day of classes.

Courses may be dropped without grade penalty anytime through the 10th week of the semester. For courses dropped during this time, the student will receive a grade of “W.” The drop dates for all courses less than 16 weeks will be that date which will be two-thirds of the course. Following the 10th week of the semester, individual courses may be dropped with permission of the instructor. The deadline for dropping any class (excluding online) is the Friday prior to the first day of final exams. Dropping and re-adding the same course for the sole purpose of returning the textbook is not allowed.

Drop/Add Schedule for Face-to-Face Classes

<table>
<thead>
<tr>
<th>Course Duration</th>
<th>Last day to add</th>
<th>Last day to drop (with instructor approval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 week course</td>
<td>4 PM on the fifth day of classes</td>
<td>Friday prior to the first day of finals</td>
</tr>
<tr>
<td>6-8 week course</td>
<td>4 PM on the second day of classes</td>
<td>Friday prior to the last week of the class</td>
</tr>
<tr>
<td>4-5 week course</td>
<td>4 PM on the first day of classes</td>
<td>Friday prior to the last week of the class</td>
</tr>
<tr>
<td>Fast-track course</td>
<td>noon of the first day of the class</td>
<td>The day prior to the last day of the class</td>
</tr>
</tbody>
</table>

Dropping/Withdrawing from Online Courses
The Iowa Community College Online Consortium (ICOC) establishes the start and end dates for online classes. The last day that a student may drop/withdraw from an online course is two weeks prior to the last day of online classes.

Withdrawal from College
Students who wish to withdraw from college are required to complete an official signed withdrawal form available in the registrar’s office in Creston or from the centers in Red Oak or Osceola.

Students may withdraw from college without grade penalty anytime during a semester prior to the first day of final examinations. Upon withdrawal, the student will receive a grade of “W” for each course of enrollment. An exit interview with the financial aid office is required of students who received a loan and withdraw from college. Students must be cleared by the library, financial aid office, and business office.

Military Call-Up Policy
For actively enrolled students/reservists who are called up for active duty by the United States Armed Forces, or for the spouse of a member if the member has a dependent child, students will be required to produce or mail call-up orders to the SWCC student services department. Upon receipt of the call-up orders, a withdrawal form will be completed to execute a 100 percent refund. In the event a student has completed a sufficient and significant portion of the coursework (as determined by the
course instructor), a grade may be assigned. In this circumstance, the 100 percent refund and withdrawal will not be used.

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**Academic Information**

**Classification of Students**

**Arts and Sciences Programs**

Freshmen: Less than 28 credits earned.
Sophomores: 28 or more credits earned.

Part-time: Students taking less than 12 credits per semester.

**Career and Technical Education Programs**

Freshmen: Students in their first year of attendance.
Sophomores: Students in their second year of attendance in the same program.

Part-time: Students taking less than 12 credits per semester.

**Classification for Summer Session**

According to SWCC’s registrar’s office, students are considered full-time when taking six or more credits during the summer session. Please note, however, 12 credits will be considered full-time for financial aid purposes.

**Attendance Policy**

Regular class attendance and consistent study habits are essential to success in college and are expected of all students at Southwestern. Experience has demonstrated that absence and tardiness contribute to academic failure. Any absence interferes with the learning process. Therefore, Southwestern is committed to the vital importance of regular attendance in all classes.

Instructors will hold all classes as scheduled, and students are expected to be in attendance. If a student is absent, the instructor is in the best position to judge the effect of that absence on the student’s progress. Students should note that individual instructors might have their own particular attendance requirements. If absence from class is due to a temporary disability, including pregnancy, or a personal or family emergency, tutoring assistance is available to students so that coursework can be maintained until regular class attendance is resumed. If prolonged absences continue, the financial aid office has the right to revoke any state or federal assistance the student may receive. If prolonged absences continue, the following may occur:

1. The dean of student services may recommend the student be dropped from the class based on faculty records and recommendation. The student and instructor will be notified immediately.
2. Any student who has been dropped from class because of excessive absenteeism has the right to appeal. Such appeal shall be made according to the process as outlined under Policies and Procedures.

The college has in place a class attendance policy related to school-sponsored activities. Please see the Student Handbook for complete policy.

**Credits**

A semester hour of credit sometimes referred to as a “credit” or as an “hour” is equal to one classroom period each week for one semester. Thus, a “two credit” or “two hour” course implies at least two hours of classroom work each week per semester. In most laboratory courses, two laboratory hours equal one hour of credit.

**Academic Load**

The normal academic load for a student expecting to graduate with an associate degree is 16 credits per semester. Students generally may not enroll in more than 19 credits without special permission from the dean of student services.

A student carrying 12 credits per semester is considered a full-time student. Visiting students may not enroll in more than ten credits per term.

**Final Exams**

Final exams will be given at the end of the semester and at the end of the summer session, as scheduled during the regular exam period.

No individuals may be given final exams at any other time without prior written approval from the vice president of instruction or his/her designee. Student requests for a waiver of the established exam schedule will be considered only for verifiable family emergencies, scheduled court dates, or required military leave. Final exams for an entire class may be rescheduled only through the request of an instructor. All exams will be carefully supervised.

**Grading**

The following system is used by instructors to report grades to students and for recording on individual record form:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Meaning</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Above Average</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
</tbody>
</table>

**Grade Point Average**

The grade point average (GPA) is obtained by multiplying the number of points assigned to the letter grade received in each course by the number of credit hours attempted for the course to arrive at the total points earned in each course. Divide the sum of grade points by the total number of credit hours attempted. The quotient represents the GPA. There is a semester GPA and a cumulative GPA on all student permanent records. The grades of I, W, P, U, N, O, and X will not be included in the GPA.

**Grades and Reports**

Grades are available on the CampusConnect system through Southwestern’s home page at www.swicc.edu. Any student, upon receiving the final grade in any course, has a right to appeal the final grade (see grade appeal process).

**Incomplete Grades**

A grade of “I” (incomplete) may be assigned by an instructor when a student has been unable to meet course requirements within a prescribed time (no less than two-thirds of the enrollment term) due to circumstances beyond control of the student. The assigned course work must be completed within four calendar months following the term in which the “I” was assigned. If the course work is not made up during that period, a grade of “F” will be assigned. A grade of “I” will not be used in computing GPA.

**Repeated Courses**

If a student is repeating a course, the last taking of the course is the one that counts on the record. All previous takings of a course are recorded on the transcript, but only the last one is computed in the grade point average. Students receiving veterans benefits cannot receive benefits for course repeats under veterans regulations.

**Audit Status**

A student may audit a course on a non-credit basis. In this case, the student does not receive either a grade or credit for the course. Although
college policy does not require audit students to write examinations, they may be permitted to do so at the discretion of the instructor. The audit privilege is also extended to students enrolled in a course for credit. Students may choose to change their status in a class from credit to audit during the period allowed for dropping courses. Students desiring such a status change can only do so by following the change of registration procedure. Tuition will be assessed at one-half of the regular tuition rate for non-laboratory classes.

Exceptions from audit classes include, but not limited to: independent study, Iowa Community College Online Consortium classes, private music lessons. Career and technical education classes may be audited, if space allows and approval is given by the dean of student services and the vice president of instruction. Students completing audit of a course will receive a grade of an “N.”

Grade Appeal Process
Students are responsible for maintaining the standards of academic performance established by the instructor for each course in which they are enrolled. However, a student may appeal a final grade that he/she feels is unwarranted. This appeal must be initiated by the student and must proceed according to the steps outlined in the current Student Handbook.

President’s Honor List
Full-time students who obtain a 3.50 grade point average during a semester will qualify to be placed on the President’s Honor List as published by the registrar’s office.

Dean’s Honor List
Full-time students who obtain a 3.00 grade point average or above during a semester will qualify to be placed on the Dean’s Honor List as published by the registrar’s office.

Phi Theta Kappa Honor Society
Any student who has completed at least 12 credits from Southwestern that can be applied to any AA, AAA, AAS, or AS degree and has a 3.50 GPA or better is eligible to join Phi Theta Kappa.

Academic Standard Policy
A student who attempts six or more academic credits must achieve a grade point average of at least 1.75 per semester. Failure to maintain the minimum grade point average of at least 1.75 per semester will result in academic warning for the next semester of attendance. If the grade point is not at least 1.75 at the conclusion of the semester of academic probation, the student may be placed on academic suspension. A student demonstrating satisfactory academic progress (at least 1.75 for an academic semester) may avoid suspension while remaining on academic warning until the cumulative grade point average reaches 1.75.

A student who is academically suspended from college may not re-enroll at Southwestern Community College unless he/she follows the steps below:

1. The student is required to submit an appeal letter to the dean of student services for consideration for re-enrollment, addressing the reasons the student was academically unsuccessful during previous enrollment and what has changed that will enable the student to be academically successful.

2. The dean or his/her designee must grant permission in writing. Certain sanctions may apply.

A student who transfers from another college or university with less than a 1.75 cumulative grade point average may be placed on academic probation during the first semester of enrollment and may be subject to the academic suspension policy. Students receiving financial aid must also abide by all financial aid regulations regarding student academic progress (SAP) and unusual enrollment history (UEH).

Academic Renewal Policy
The academic renewal policy is described as the removal of one or more of a student’s entire academic term(s) from future degree and GPA considerations. To be eligible for academic renewal the student must have a break in enrollment at Southwestern of two or more consecutive years, must not have graduated from any program at Southwestern, must currently be enrolled in classes, and must have successfully completed 12 credits of coursework with a minimum of 2.0 GPA after returning to Southwestern.

A. Academic renewal may only be applied to an academic term(s) completed prior to the student’s extended absence.

B. All courses and credits that were taken during the chosen term(s) will be removed from consideration for GPA and degree requirements.

C. To remove more than one term, the terms must be consecutive.

D. All courses will remain on the student’s academic record, but the grades will be changed to “X.”

E. A student may be granted “academic renewal” only once.

Academic renewal petitions are located in the registrar’s office. A formal letter requesting renewal must be submitted with the completed petition. The student will then meet with the dean of student services who will determine approval.

Permanent Record
Southwestern Community College retains a permanent record file for each student. Included in this file is evidence of enrollment, high school and/or GED/HSED transcripts, previous college transcripts, and a Southwestern transcript.

Academic Transcript Requests
Southwestern Community College has partnered with the National Student Clearinghouse for official transcript orders.

There is a $5 fee per transcript ($2.75 transcript fee and $2.25 processing fee). Transcripts will not be processed if there is a business office hold on the student’s account. If a hold exists on a student’s account, he/she will be notified via e-mail.

Once an order has been received, the transcript will be mailed from SWCC within five to seven business days. Please allow two extra weeks when the request is at the end of a term. If the student selects for the transcript to be received by mail, please allow three to five additional days for delivery by the United States Postal Service.

If a student has a question regarding transcript orders, he/she may contact Georgia Paulsen, SWCC student records, at paulsen@swcciowa.edu or 641.782.1326.

To order a transcript, please visit SWCC’s Web site at www.swcciowa.edu/transcripts.

Family Educational Rights and Privacy Act
What is FERPA?

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.
FERPA gives parents certain rights with respect to their children’s education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level. Students to whom the rights have transferred are “eligible students.”

Parents or eligible students have the right to inspect and review the student’s education records maintained by the school. Schools are not required to provide copies of records unless, for reasons such as great distance, it is impossible for parents or eligible students to review the records. Schools may charge a fee for copies.

Parents or eligible students have the right to request that a school correct records which they believe to be inaccurate or misleading. If the school decides not to amend the record, the parent or eligible student then has the right to place a statement with the record setting forth his or her view about the contested information.

Generally, schools must have written permission from the parent or eligible student in order to release any information from a student’s education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):

- School officials with legitimate educational interest;
- Other schools to which a student is transferring;
- Specified officials for audit or evaluation purposes;
- Appropriate parties in connection with financial aid to a student;
- Organizations conducting certain studies for or on behalf of the school;
- Accrediting organizations;
- To comply with a judicial order or lawfully issued subpoena;
- Appropriate officials in cases of health and safety emergencies; and
- State and local authorities, within a juvenile justice system, pursuant to specific State law.

**Directory Information**

Southwestern Community College may disclose, without consent, “directory” information, which includes:

- Student’s name
- Address
- Telephone listing
- Electronic mail address
- Photograph
- Date and place of birth
- Major field of study
- Dates of attendance
- Grade level
- Degrees, honors, and awards received
- Student ID number, user ID, or other unique personal identifier used to communicate in electronic systems that cannot be used to access education records without a PIN, password, etc. (A student’s SSN, in whole or in part, cannot be used for this purpose.)

Any student objecting to his or her directory information being made public must file notice of such objection with the registrar’s office.

For additional information, the student may contact: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, D.C. 20202, 800 USA.LEARN, 800.872.5327 (voice)

Individuals who use TDD may call 800.437.0833.

**Educational Records**

The college has established the following procedures to provide an opportunity for the student to correct or delete inaccurate records, or to insert a written explanation of record content:

1. Discuss the issue first with the individual staff person who established or maintains the records. Presumably most issues can be resolved at this level.
2. If a satisfactory resolution cannot be reached, the student should submit the question to the dean of student services who will investigate and respond in writing.
3. If the decisions are in agreement with the student’s request, the appropriate records will be amended.
4. If the decisions are not in agreement, the student will be notified within a reasonable period of time that the records will not be amended; and the student will be informed by the dean of student services of his/her right to formal hearing.

**Records Appeal**

The student has the right to inspect and review his/her educational records. The registrar’s office at Southwestern has been designated to coordinate the inspection and review of such records. The student must make a written request to the registrar’s office to inspect records. Only records covered by the “Family Rights and Privacy Act of 1974 as Amended” will be made available within 45 days of the receipt of the written request. Educational records do not include records of instructional, administrative, and educational personnel, which are the sole possession of the maker and are not accessible or revealed to any individual except a temporary substitute; student health records; employment records; and alumni records. Health records however, may be reviewed by physicians of the student’s choosing. The student has the right to request and receive a response that explains or interprets his/her educational records. A student may challenge the accuracy of records maintained by the college on the grounds the records are inaccurate, misleading, or otherwise violate the privacy or other rights of the student.

**Academic Records**

The official academic records of enrollment for credit earned by a student at Southwestern Community College shall be retained in perpetuity. All student record documents, which are used to create, update, and support the accuracy of the official academic transcript, veterans’ records, and placement records shall be retained for three years after a student’s last enrollment. These documents may then be destroyed in the manner most appropriate. All student financial aid records will be retained five years following the end of the fiscal year for which funds were awarded. No records may be preserved beyond graduation or other final departure from the institution except:

- Academic records subject to the limitations of nondisclosure
- Financial records of continuing obligations
- Medical and psychiatric records subject to normal rules for privileged information
- Financial aid records
Student requests for a formal hearing must be made in writing to the vice president of instruction, who, within a reasonable period of time after receiving such requests, will inform the student of the date, place, and time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or represented at the hearing by one or more persons of their choice.

The Academic Review Committee will be the hearing panel. Decisions of the hearing panel will be based solely on the evidence presented at the hearing, and will consist of written statements summarizing the evidence and stating the reasons for the decisions, and will be delivered, in writing, to all parties concerned. If the decision is in favor of the student, the education records will be corrected or amended in accordance with the decision of the hearing panel. If the decision is unsatisfactory to the student, the student may comment on the information in his/her educational records.

The student’s written comments should set forth any reasons for disagreement with the decision of the hearing panel. The statements will be placed in the student’s educational records and released when the records in question are disclosed. A student who believes that the adjudication of his/her challenge was unfair, or not in keeping with the provisions of the Act may request in writing as a final appeal, assistance from the President of the college. Students who believe their rights have been abridged may file complaints with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, D.C. 20202, concerning the alleged failure of Southwestern to comply with the Act.

## Distance Education

### Iowa Community College Online Consortium (ICCOC)

Southwestern Community College, in partnership with five other Iowa Community Colleges, offers an online Associate of Arts degree and an online Associate of Applied Science degree in accounting, business administration, or agricultural business. Southwestern offers more than 400 online courses. With online education the student can choose his/her study time and submit assignments electronically. Instructors are available by phone and e-mail to help guide the learning process. Classes may involve considerable interaction with classmates through threaded discussion and/or live chat. Course descriptions are available at [www.iowaconline.org](http://www.iowaconline.org).

### Iowa Communications Network (ICN)

The state of Iowa has financed 2,600 miles of fiber optics, connecting every county in Iowa. These fiber optic lines provide live audio and visual communication potential to all citizens in Iowa at more than 500 sites. This allows Southwestern to offer classes at off-campus sites throughout Area XIV. Southwestern students at one campus may take advantage of courses offered at another campus via the ICN. In addition, many opportunities are available for credit courses from other colleges in Iowa, non-credit courses, and statewide meetings.

### State Authorization Reciprocity Agreement

Southwestern Community College is an institutional participant in the National Council for State Authorization Reciprocity Agreements (NC-SARA). The State Authorization Reciprocity Agreement (SARA) is a national agreement among states ensuring standards for institutions offering postsecondary distance education courses and programs. Approved Iowa institutions are listed on the NC-SARA Web site: [http://www.nc-sara.org/states/IA](http://www.nc-sara.org/states/IA).

## Graduation Information

Southwestern Community College grants degrees, diplomas, and certificates to those students who successfully complete programs offered by the college. Students must maintain a 2.0 grade point average on all applicable work (nursing students must earn a grade of “C” or better in all courses).

All requirements of the chosen program must be satisfied, although adjustments may be made when program curriculum has changed and courses are no longer available. Graduation requirements in effect at the time of a student’s initial enrollment will remain in effect as long as the student is continuously enrolled at Southwestern Community College.

Continuous enrollment is defined as consecutive fall and spring terms, and is subject to a five-year limitation. If changes occur in graduation requirements subsequent to initial enrollment, the student may elect to graduate under the most recent requirements. A student must satisfy the most recent requirements if a break in enrollment in the college for one or more consecutive semesters occurs. Students who elect to change their major must satisfy requirements in effect at the time of the change.

Please refer to the academic section of the catalog or refer to Southwestern’s Web site for requirements for your program.

It is the responsibility of the student to know and to observe the requirements of his/her curriculum and the rules governing academic work. Although the advisor will attempt to help the student make wise decisions, the final responsibility for meeting these requirements for graduation rests with the student.

In those instances where a student receives information from an advisor, which might have an impact upon graduation requirements or application of credits toward graduation, the student is advised to secure such commitment in writing. It is further advised that such a commitment be retained by the student until the sequence of events is such that it would be no longer necessary to demonstrate the establishment of such a commitment.

It is recommended that students have their credits evaluated for graduation by their faculty advisor, registrar’s office, or a member of the advising staff one semester before actual graduation. This is to ensure all graduation requirements will have been met by the time the student plans to graduate.

### Graduation

Southwestern conducts two graduation ceremonies each year in the Student Center gymnasium at the Creston campus. Spring commencement will be held on Friday of the last week of the spring semester at 7:30 p.m. Students who complete requirements in December and May are invited to participate in the spring commencement ceremony. Summer commencement will be held on Friday of the last week of the first summer session at 7:30 p.m. Students who meet their graduation requirements at any time during the summer are invited to participate in the summer commencement ceremony. There is no charge to participate in the graduation ceremony, and participation in the ceremony is voluntary.
Application for Graduation and Commencement Participation
Candidates for graduation must complete a Prospective Graduate Application available online at www.swcc-iowa.edu/grad_app. There is no graduation fee.

Prospective graduates should meet with their faculty advisors when registering for their final term to make sure that all requirements will be met and submit their Prospective Graduate Applications at that time. The deadlines for submission are below:

Fall graduates—September 25
Spring graduates—February 26
Summer graduates—February 26 (if enrolled during spring semester)

Note: Summer graduates not enrolled during spring must apply by May 16.

Please indicate whether or not you plan to participate in the commencement ceremony and provide your chest and height measurements if applicable. Caps are adjustable so cap size is not necessary. Indicate all majors if you plan to receive more than one degree, diploma, or certificate.

Any student who submits an Application for Graduation, but will not complete requirements for the term indicated on the Application, must contact the registrar’s office and submit another application for the term in which the requirements will be met.

Academic Certificates/Diplomas/Degrees
Requirements
Southwestern Community College grants degrees, diplomas, and certificates to those who successfully complete programs offered by the College. The requirements for each type of award are indicated as follows:

Certificate of Completion
A certificate of completion is issued to signify that a student has satisfactorily completed a specific short-term course of study.

Diploma
A diploma is awarded to those individuals who complete an approved program of study. Specific requirements for the programs leading to diplomas are listed in this catalog in the academics section.

To receive a diploma the student must:
A. maintain at least a 2.00 grade point average on all work applicable for the diploma. (Nursing students must have a “C” grade or better in all courses).
B. complete, at Southwestern Community College, a minimum of one-third of the credits applicable to the degree being pursued.
C. complete the final 15 credits at Southwestern Community College (or petition to the dean of student services to receive an exception).
D. complete all required courses in a particular program of study.

Note: Developmental courses will not be counted toward a diploma.

Associate of Arts Degree (AA)
The Associate of Arts degree at Southwestern Community College is primarily a liberal arts degree intended for transfer.

Liberal arts is baccalaureate oriented and includes courses within communications, social and behavioral sciences, mathematics, sciences, physical education and humanities. Specific requirements for the programs leading to associate of arts degrees are listed in this catalog in the academics section.

To receive an AA degree a student must:
A. maintain a 2.00 grade point average on all work applicable for the AA degree.
B. complete at Southwestern Community College a minimum of one-third of the credits applicable to the AA degree being pursued.
C. complete the final 15 credits at Southwestern Community College (or petition to the dean of student services to receive an exception).
D. complete a minimum of 64 credits.
E. include at least 43 credits of general education courses.
F. include at least 19 credits of electives.

Note: Developmental courses will not be counted toward an AA degree.

Associate of Science Degree (AS)
Students interested in math or science may choose to earn an Associate of Science (AS) degree. The AS degree is designed for students who plan to transfer into four-year programs of study in science or mathematics. This degree option allows students to take more math and science courses than would be possible if they completed the requirements for an Associate of Arts (AA) degree.

The AS degree requires a minimum of 20 credits be completed in math and science with at least one course in each. The AS degree also includes 20 credits of electives that can come from math and science. Students transferring an AS degree to an Iowa public university must have maintained a minimum cumulative GPA of 2.0 on all graded arts and sciences courses acceptable for transfer.

Specific requirements for the programs leading to Associate of Science degrees are listed in this catalog in the academics section.

To receive an AS degree a student must:
A. maintain a 2.00 grade point average on all work applicable for the AS degree.
B. complete at Southwestern Community College a minimum of one-third of the credits applicable to the AS degree being pursued.
C. complete the final 15 credits at Southwestern Community College (or petition to the dean of student services to receive an exception).
D. complete a minimum of 64 credits.
E. include at least 42 credits of general education courses.
F. include at least 20 credits of electives.
G. complete two credits of physical education.

Note: Developmental courses will not be counted toward an AS degree.
The Associate of General Studies degree is designed for, but not limited to, those individuals who wish to choose a career and technical education course of study and wish to seek a degree suited to their unique needs. While some courses taken to complete this degree may transfer to four-year colleges/universities, students are cautioned that this degree is not intended as a transfer degree. This degree does not represent a specific course of study and may include career and technical education credits.

Students should check with potential employers and institutions to which they might transfer to determine if the AGS degree will be compatible with their future goals. Specific requirements for the programs leading to associate of general studies degrees are listed in this catalog in the academics section.

To receive an AGS degree a student must:

A. maintain a 2.00 grade point average on all work applicable for the AGS degree.
B. complete at Southwestern Community College a minimum of one-third of the credits applicable to the AGS degree.
C. complete the final 15 credits at Southwestern Community College (or petition to the dean of student services to receive an exception).
D. complete a minimum of 64 credits.
E. include at least 15 credits of general education courses.
F. include at least 49 credits of electives.

**Note:** Developmental courses will not be counted toward an AGS degree.

### General Education Competency Areas

The general education areas and outcome statements represent the knowledge and skills that all students who graduate from Southwestern Community College should achieve as a result of their college education. The general education outcomes are delivered through coursework, lab activities, co-curricular activities, and non-instructional activities at Southwestern. All instructional and non-instructional divisions are involved in teaching or supporting and assessing general education outcome areas and statements.

The college maintains the following general education outcome areas and statements:

**Communication**

Students will demonstrate a proficiency in communication by:

A. writing documents that are clear, organized and appropriate for the reader.

B. presenting an organized, clearly spoken oral message appropriate to purpose and audience.

C. listening attentively to a verbal message and understanding its content.

**Critical Thinking**

Students will demonstrate critical thinking skills by:

A. analyzing information in any form for accuracy, relevancy and reliability.

B. scrutinizing an argument to separate fact from opinion and identifying assumptions and inferences.

C. assessing a problem and proposing reasonable solutions to it.

**Cultural Awareness**

Students will develop an awareness of their own culture as well as the culture of others by:

A. recognizing culturally based differences between themselves and others including language, social and political systems, and religion.

B. relating relevant historical information to current situations.

C. explaining the cultural importance of the fine arts.

**Financial Literacy**

Students will develop financial literacy by:

A. constructing a budget that includes short-term and long-term financial planning and goals.

B. explaining the impact of indebtedness on finances and credit ratings.

C. discussing economic variables such as interest rates, installment payments and inflation.

**Interpersonal Skills**

Students will demonstrate professional and interpersonal behaviors by:

A. applying appropriate work effort for the successful completion of challenging assignments.

B. cooperating with others as a member of a team.

C. demonstrating a willingness to act as a leader in appropriate situations.
D. caring for personal health.
E. recognizing and valuing the existence of different points of view.

Math
Students will demonstrate mathematical proficiency necessary for success in their chosen field of study or occupation by:
A. obtaining correct mathematical results with or without technological assistance.
B. identifying relevant data for solving a problem.
C. manipulating data to solve a problem.
D. distinguishing whether a mathematical solution is reasonable or erroneous.

Reading Comprehension
Students will demonstrate reading comprehension by:
A. accurately interpreting documents appropriate for their field of study or occupation.
B. discussing the accuracy, reliability and appropriateness of a variety of written documents.
C. successfully following written instructions.

Science
Students will demonstrate an understanding of scientific knowledge necessary for success in their chosen field by:
A. applying basic scientific principles to complete a task, project or assignment.
B. discussing how their actions will impact an area of science.

Technology Literacy
Students will demonstrate technology literacy by:
A. using technology appropriate for the field of study or occupation chosen.
B. using information technology responsibly as a tool for creativity, research, publication, critical thinking and/or communication.
C. discussing the impact of technology on the individual and society.

Academic Freedom Policy
Topics selected for study by full-time, part-time and adjunct faculty members should contribute to the major purpose of the curriculum and materials should be available that represent alternative points of view. Topics studied should promote freedom of inquiry appropriate to an institution of higher education.

A. Instructors shall be responsible for selection of topics to be covered in the courses they teach. These topics are to be included in the approved syllabus for the course.
B. Academic freedom does not permit unlawful discrimination or harassment. Religious, sectarian, political, and other issues may be included in a course of study as long as there is no intent to indoctrinate students in a particular belief or point of view. Faculty will be expected to promote tolerance of differing viewpoints.
C. It is recognized that an essential function of education is a probing of opinions and an exploration of information and ideas that may cause some students discomfort. It is further recognized that academic freedom ensures the faculty member’s right to teach and the students’ right to learn.
D. Course syllabi should be updated annually and a current copy posted on the SWCC network in the appropriate folder.
E. Each instructor is responsible to make recommendations for books and other instructional materials to be made available to students in the bookstore or the Learning Resource Center. Purchases of recommended materials will be made in accordance with the policies and procedures of these departments.
F. Any student or group of students who have concerns about the appropriateness of material in one of their classes must follow the steps outlined below:
1. Concerned student(s) shall meet with the instructor to state their concerns and work towards a resolution.
2. If the issue is not resolved by conference between the instructor and the concerned student(s), the student(s) must then request a meeting with the instructor and the instructor’s department chair. At that meeting, the department chair will facilitate a discussion of the issue and encourage an appropriate settlement, including, if necessary, accommodations to the course material.

3. If the concerned student(s) are not satisfied with the resolution of the issue at the department chair level, they must request a meeting with the vice president of instruction or the vice president’s designee. The vice president or designee shall meet with the concerned students and the instructor, either separately or together. Following such meeting, the vice president or designee shall rule on the appropriateness of the material in question and direct the instructor and students as to how each is to proceed. Such ruling shall be based upon all the considerations contained in this policy and shall consider the right of the instructor to exercise academic freedom in the selection of materials and the right of the student to be free from harassment and to attend Southwestern in an environment that is free from hostility.

G. With respect to this procedure, concerns of students not enrolled in the class in question will be referred to the formal student complaint process outlined in the student handbook for further guidance to resolve the concern.
H. Concerns of other individuals with respect to this procedure will be referred to the problem resolution procedure outlined in the employee handbook for further guidance to resolve the concern.
I. Matters of discrimination, harassment, bullying, and/or sexual offense that arise in the educational setting shall be referred to the educational equity (Title IX) coordinator as needed.

Educational Costs
(subject to change without prior notice)

Tuition (2016-2017 Rates)
Credit Programs Per Credit
Resident (In-State) Tuition $158.00
Fee $12.00
### Fees

#### International Student
- **Processing Fee**: $75.00
- **Transcript Fee**: $5.00

#### Additional Fees
- **Private Music, per course**: $175.00
- **Auto Collision Repair Tool Rental, fee per year**: $250.00
- **Automotive Engine Repair CPR Training Fee (AUT163)**: $55.00
- **Automotive Repair Technology Tool Rental, fee per year**: $250.00
- **Animal Reproduction (AGS331) spring semester**: $100.00
- **Basic Construction Skills (CON141)**: $100.00
- **Carpentry CPR Training Fee (CON159) spring semester**: $55.00
- **Collision Lab IV CPR Training Fee (CRR364)**: $55.00
- **Cisco Networking (ICND 1) Certification Exam (NET212)**: $150.00
- **Computer Hardware Basics COMPTIA A+ Certification Exam (NET122)**: $194.00
- **Electrical CPR Training Fee (ELE214) spring semester**: $55.00
- **Embedded Online Content Fee per course (BIO168, BIO173)**: $67.00
- **Embedded Online Content Fee per course (CHM151, CHM152, CHM166, CHM176, CRJ130, EDU212, MAT054, MAT063, MAT104, MAT110, MAT111, MAT121, MAT129, MAT140, MAT156, MAT772, MG130, MKT110, PHS113, SOC110)**: $117.00
- **Fundamentals of Network Security COMPTIA Security+ Exam (NET612)**: $302.00
- **General Industry Safety (IND114)**: $100.00
- **Industrial Maintenance CPR Training Fee (ELT717)**: $55.00
- **Introduction to Wiring (ELE178)**: $100.00
- **Nursing Fee ADN per year**: $235.00
- **Nursing Fee LPN per year**: $185.00
- **Technology & Lab Fee (per credit hour for the following prefixes: ADM, ADN, AGA, AGB, AGC, AGM, AGP, AGS, ART, AUT, BCA, BIO, CAD, CHM, CIS, CON, CRR, CSC, DRF, ELE, ENV, GRA, HIT, IND, MTR, MUS, NET, PHS, PHY, PNN, STR, WDV-with the exception of MUS100, ART101, ART120, ART204, online courses, off-site high school courses, and internships)**: $15.00
- **Third Party Fees**
  - **Welding CPR Training Fee (WEL800)**: $55.00
- **Welding Technology & Lab Fee per credit hour**: $25.00
- **Security+ Exam (NET612)**: $3,480.00

#### Room and Board, per semester (2016-2017 Rates)
- **Wilson Hall & West Hall**: $3,105.00
- **Spartan Court, Spartan Hall, Spartan Suites**: $3,480.00
- **Dorm Deposit**: $150.00
- **Room Only-Summer & Winter Break**
  - **Registered Student**: $15.00 per day
  - **Non-registered Student**: $25.00 per day

#### Payment Options
- Tuition and fees are due at the beginning of each academic term. All students must contact the business office on or before the first day of the term to discuss which of the following payment options will be used:
- **Approved financial aid**
- **2. Payment in full either:**
  - at Southwestern Community College by cash, check, money order, or credit card* made payable in U.S. funds.
  - online with e-cashier by direct debit to checking or savings account or credit card.
- **3. Payment plan**

*Note: The college reserves the right to take any and all action necessary to collect this debt, including the referral of the student’s account to a collection agency or law firm. Southwestern Community College participates in the Iowa State Department of Administrative Services Offset Program. This program allows the State of Iowa to apply any funds owed to the student, such as an income tax refund, to any uncollected educational debt owed by the student to the college.

#### Indebtedness Policy
A student may not register for any new term while he/she has a prior unsettled indebtedness to Southwestern Community College. During the period in which the indebtedness remains unsettled, no transcripts or other official credentials can be obtained from the college. Certificates, diplomas, or degrees will not be granted, nor will credits be transferred to another college until all accounts are settled. Delinquent accounts may be charged an additional fee.

#### Returned Checks
A $30 service charge, plus postage and any additional charges will be assessed for all returned checks.

#### Charge Slips
A student with pending or approved financial aid that exceeds his or her tuition and fee charges may obtain a charge slip (until financial aid has been disbursed or applied).
has been disbursed) from the business office to obtain books and supplies at the college bookstore. The student must be registered for classes and have an official computer registration in order to obtain a charge slip. Students are ultimately responsible for any pending charges.

**Refund Policy**
Refunds of tuition and fees are calculated as of the date on the official withdrawal form completed in writing by the student and on file in the student services office. Refunds on check payments may be refunded after two weeks have been allowed for the check to clear. Refunds cannot be disbursed until the business office receives the necessary documentation from student services or other departments.

Refunds of tuition and fees will be made as follows based on the beginning date of classes and the date on the withdrawal form:

*Withdrawal Period... Refund*

Before the end of the first week 100%
Before the end of the second week 50%
After the end of the second week 0%

*Note: This is based on a 16-week term, shorter terms will be pro-rated.

**Refund Checks**
Refunds under $1.00 may be refunded through petty cash. The written refund request or appropriate withdraw paperwork must be received by the business office by noon on Monday to process a refund check on Friday of the same week. If the request is received after noon on a Monday, a refund check will be issued the following week on Friday.

**Direct Deposit**
Direct deposit is an alternative to receiving a refund check for financial aid, tuition, and book buyback refunds. Students may sign up for direct deposit through their CampusConnect account. Direct deposits are released on Fridays.

*Note: Work-study checks are not included.

**1098-T**
The 1098-T form allows the student or the person who claims the student as a dependent, to take either the tuition and fees deduction or claim an education credit on Form 1040 or 1040A for the qualified tuition and related expenses paid during the calendar year.

Students may now register to receive their 1098-T forms electronically. Students should log on to SWCC’s CampusConnect and click on the bullet point that reads, “Make a selection from the Electronic 1098-T Signup”

Prior to January 31, an e-mail will be sent to the student’s SWCC e-mail account stating how to get their document on CampusConnect.

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**Financial Aid**
Financial aid is money available from federal, state, institutional, and private sources used to help students meet college expenses. Financial aid can help pay for direct educational costs such as tuition, fees, and books, as well as for personal living expenses such as housing, food, and transportation. Financial aid exists to assist families in paying for the costs of attending college. Most financial aid is based on financial need. Financial aid is credited directly to students’ accounts to pay for allowable and authorized charges before any excess funds are given to students for personal living expenses.

**General Eligibility**
A student must be enrolled as a regular student in an eligible program to receive Title IV federally-funded financial aid: Pell Grant, Supplemental Education Opportunity Grant (SEOG), Federal Work-Study, Federal Direct Stafford Loans (Subsidized, Unsubsidized) and Federal Direct Parent PLUS Loans.

A student must:

1. Be a U.S. citizen or eligible non-citizen
2. Be enrolled for the purpose of obtaining a degree or certificate in an eligible program
3. Have one of the following:
   a. High school diploma
   b. High school equivalency diploma (GED or HSED)
   c. Certification of completion of a home-study program if the program is recognized by student’s home state
   d. Has passed an independently administered test (COMPASS or ACCUPLACER test) used for determining the student’s ability to benefit from post secondary education and is beyond the age of compulsory school attendance for Iowa

Students with an intellectual disability can receive funds from the Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), and Federal Work Study (FWS) programs. They must be enrolled or accepted for enrollment in a comprehensive transition and postsecondary program (as defined in CFR 668.231) for students with intellectual disabilities and must maintain satisfactory academic progress. These students:

1. do not have to be enrolled for the purpose of obtaining a degree or certificate, and
2. are not required to have a high school diploma or its recognized equivalent.

**How to Apply for Financial Aid**
To apply for federal or state financial aid, students must:

A. Complete the Free Application For Federal Student Aid (FAFSA) online at www.fafsa.ed.gov and have the resulting Student Aid Report (SAR) sent to the financial aid office by indicating the Southwestern school code of 001857 on the FAFSA;

B. Provide a copy of their own and their parents’ federal income tax transcript (dependent students) or their spouse’s federal income tax transcript (independent students), if selected for verification; and

C. Submit other necessary documents, if requested.

**Deadlines**
The FAFSA may be submitted after October 1 for the following academic year. Southwestern requires students to provide completed federal
tax return information on the FAFSA before financial aid is awarded. It is important that students complete the FAFSA as early as possible so that he/she can be considered for certain limited federal and state funds. It is also helpful when planning how the student pays for the costs of the upcoming academic year. To be considered for state aid, the student’s FAFSA must be received by the U.S. Department of Education’s Central Processing System by July 1.

**Determination of Financial Need**

Information from students’ FAFSAs and resulting Student Aid Reports (SAR) will help the financial aid office identify those students with financial need.

The financial aid applicant and/or family of the applicant is expected to be primarily responsible for their educational and living expenses. Financial assistance from Southwestern Community College should be viewed only as supplementary to the efforts of the applicant and family. Most federal financial aid programs require the assessment of financial need based on the family’s ability to contribute toward educational expenses to determine eligibility.

Financial need is defined as the difference between a student’s cost of attendance and expected family contribution (EFC), as reported on the SAR. The greater the difference between the cost of attendance and EFC, the greater the need of the student.

**Award Processing**

The financial aid office will attempt to meet students’ financial need pending the availability of funds. Federal and state financial assistance will continue to be awarded until all funds are committed or until the specified deadlines, whichever occurs first.

**Award Package**

The financial aid office will notify students by mail of the types and amounts of federal financial and state aid for which they qualify. Students must sign, date, and return their award offers by the deadline specified on the offer to confirm acceptance of their awards. Students may accept all or part of their awards. Offers of all financial aid are void, if the required documents are not properly completed and returned. These documents may include the Conditions Statement, Master Promissory Note, and Loan Entrance Counseling (paper or online).

**Attendance Policy**

If a student demonstrates poor attendance for an extended time after aid is received without the approval of a faculty member, it may result in the loss of financial aid funds. Students are only able to receive financial assistance while they are attending and participating in their courses; therefore, a last date of an academically related activity will be determined for a student who stops attending and participating in class and a refund formula will be used to determine the amount of financial aid the student was eligible to receive during the period of attendance. The U.S. Department of Education and federal aid programs will receive the appropriate refund of financial assistance based upon the student’s last date of an academically related activity using the Return of Title IV Funds Policy. State aid programs administered by the Iowa College Student Aid Commission will receive the appropriate refund of state funds using the college’s institutional refund policy. Students will be notified, if they owe money back to a federal or state financial aid program or to Southwestern, if funds have been returned by the College on the student’s behalf to the appropriate aid program(s).

**Return of Title IV Funds Policy**

This information is being provided to prospective students in accordance with federal consumer information regulations. These regulations implement statutory changes made to the Higher Education Act (HEA) of 1965, as amended, by the Higher Education Amendments of 1998 for the treatment of Title IV HEA program funds when a student withdraws from Southwestern Community College.

The college’s refund policy exists for calculating the refund of institutional and state charges. The federal “Return of Title IV Funds” policy dictates the amount of Federal Title IV aid that must be returned to the federal government by the school and the student. The federal formula is applicable to a student receiving any type of federal aid, other than Federal Work-Study, if that student ceases attendance on or before the 60 percent point of the payment period.

The federal formula requires a return of Title IV aid, if the student received federal financial assistance in the form of a Pell Grant, Supplemental Educational Opportunity Grant, Federal Direct Stafford Subsidized, Unsubsidized, Parent PLUS Loan or PLUS Loan (Graduate Student) and ceased attendance on or before completing 60 percent of the payment period.

The percentage of Title IV aid to be returned is equal to the number of calendar days remaining in the payment period divided by the number of total calendar days in the payment period; scheduled breaks of more than four consecutive days are excluded.

If any non-federal funds are to be returned in addition to the Title IV aid, they will be used to repay Southwestern Community College funds, state funds, other private sources, and the student in proportion to the amount received from each non-federal source, as long as there was no unpaid student account balance before any funds are returned to the student.

The Return of Title IV Funds policy requires a return of funds in the following order:

1. Unsubsidized Direct Stafford Loan
2. Subsidized Direct Stafford Loan
3. Direct PLUS Loan (Parent)
4. Pell Grant
5. Federal SEOG
6. Other Title IV programs (does not include Federal Work-Study)

**Note:** If funds are released to a student because of a credit balance on the student’s account, then the student may be required to repay a portion of the federal funds to the federal programs or to Southwestern for any federal funds returned on the student’s behalf to the federal programs.

Worksheets used to determine the return of Title IV aid are available upon request from the financial aid office. Contact the financial aid office for further information regarding these policies.

**Determination of Withdrawal Dates**

The date used for an official withdrawal will be the date on the official withdrawal form completed by the student. Students can receive an official withdrawal form from the registrar’s office. In the case of a student who cannot make it into the college, the registrar will take the withdrawal per a phone call from the student. The registrar will then document the phone call on the official withdrawal form. If a student ceases attendance (drops or withdraws) from all his or her Title IV eligible courses in a payment period or period of enrollment, the student must be considered a withdrawal for Title IV purposes.

If the student fails to notify Southwestern of their desire to withdraw they will be considered an unofficial withdrawal. Students who do not
return from an approved leave of absence will also be considered an unofficial withdrawal. The school will use the student’s last date of an academically related activity as the withdrawal date. This date will be obtained from the students instructors.

Examples of academically related activities can include but are not limited to:

- Physical class attendance where there is direct interaction between instructor and student
- Submission of an academic assignment
- Examination, interactive tutorial, or computer-assisted instruction
- Study group assigned by school
- Participation in on-line discussion about academic matters
- Initiation of contact with instructor to ask question about academic subject

Determination/documentation must be made by the school. A student’s self-certification of attendance is not acceptable unless it is supported by school documentation.

At the end of each semester the financial aid director will run a report to determine which students received an “F” for the semester. On this report there is a last date of an academically related activity that the instructors enter when they are entering their final grades. The last date of attendance will be used to perform a Return of Title IV calculation.

**Student Financial Aid Available**

Below is a list of some of the types of financial aid available for which students may apply or be awarded. This is not an exhaustive list as some programs are added or removed depending on funding. Students must apply and be eligible to receive any of the following funds. If students have concerns about funding their education, they should contact the financial aid office to discuss their individual situations.

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant
- Federal Work-Study
- Iowa Vocational-Technical Tuition Grant
- Kibbie Grant
- Iowa Tuition Grant
- Iowa National Guard
- All Iowa Opportunity Scholarship
- All Iowa Opportunity Foster Care Grant Program
- Federal Direct Loans (Subsidized, Unsubsidized)
- Federal Parent PLUS Loans
- Institutional Employment
- Pathways for Academic Career Employment (PACE)
- Southwestern Education Foundation Scholarships
- Other State and Institutional Scholarships

**Other Resources**

The following types of financial assistance may be available to eligible Southwestern students from independent entities (eligibility is not determined by Southwestern):

- Veterans Assistance (GI Bill)
- Vocational Rehabilitation Services
- Workers Investment Act (WIA)
- Other government/state agency resources
- Other privately-funded scholarships

**Description of Financial Aid Programs**

Southwestern awards and administers many types of financial aid from federal, state, institutional, and private sources. Following is a brief explanation of some of these programs. For more detailed information, please contact the financial aid office.

The **Federal Pell Grant**, unlike a loan, does not need to be repaid. Pell Grants are awarded only to undergraduate students who have not earned a bachelor’s or professional degree. To establish eligibility for a Federal Pell Grant, a student must complete the Free Application For Federal Student Aid (FAFSA) and have the resulting Student Aid Report (SAR) sent to Southwestern before the student’s last date of enrollment or the end of the enrollment period.

The **Federal Supplemental Educational Opportunity Grant** is a federally-funded grant and given to undergraduate students on the basis of exceptional financial need with priority given to Federal Pell Grant recipients with the lowest Expected Family Contributions (EFC).

The **Federal Work-Study program** utilizes federal funds, matched with institutional funds, to provide part-time employment for needy students allowing students to earn money to help pay for educational expenses. The number of hours assigned is determined by financial need, satisfactory academic progress, enrollment and available funds. Students are only paid for hours worked, not awarded. Students may not work more than 20 hours per week during periods of class attendance. Students may be employed both on-and off-campus and are paid once a month in accordance with the college payroll system. Jobs will run the spectrum from skilled positions to general labor. Students will be paid at least the minimum wage per hour.

**Other Employment**, such as Institutional Employment (non-need-based), may also be available. This program is administered in the same manner as the Federal Work-Study program.

The **Iowa Vocational/Technical Tuition Grant** is designed for students who are Iowa residents enrolling in career and technical education courses at Iowa community colleges. Students must meet the financial aid application filing deadline of July 1.

The **Iowa Tuition Grant** is designed for exceptionally needy undergraduate Iowa residents attending college in the state of Iowa. This grant, available for full-time and part-time students, is intended to promote access to Iowa colleges. Due to limited funding, only a selected number of needy applicants will be assisted.

The **Kibbie Grant Program** provides need-based financial assistance to Iowa residents enrolled in career education (career-technical) programs at Iowa community colleges. Grants for full-time students are designed to cover one half of the average tuition and mandatory fees at Iowa community colleges, depending on the student’s financial need and the amount of total funding available.

The **Iowa National Guard Education Assistance Program** provides funds to members of Iowa National Guard units for covering the costs of attending Iowa colleges and universities. Eligibility for this program is determined by the Adjutant General of Iowa and funding for the program is determined on an annual basis by the Iowa General Assembly. To apply for this program, individuals must submit
an application to their Unit Commander on or before September 1 of the academic year for which funds are being requested. The Adjutant General determines eligibility and then notifies the Iowa College Student Aid Commission (ICASC) of approved applications. Southwestern is notified by the Iowa College Student Aid Commission of the student’s eligibility.

The All Iowa Opportunity Scholarship is a state-funded program that will provide scholarships to students who do well in high school and demonstrate financial need. This scholarship is administered by the Iowa College Student Aid Commission.

The All Iowa Opportunity Foster Care Grant is a state-funded program that will provide youth aging out of the Iowa foster care system with grant assistance to pay for postsecondary education and training expenses. This grant is designed to increase college access to youth in foster care and is administered by the Iowa College Student Aid Commission.

A Federal Direct Stafford Subsidized Loan is available to a student who meets the general eligibility requirements. The loan is need-based with the federal government paying interest on the loan, while the student is enrolled in school, during the grace period, and during periods of authorized deferment.

The Federal Direct Stafford Unsubsidized Loan is non-need based and available to a student who is interested in loans and has loan eligibility. The interest rate and loan limits are identical to the Direct Stafford Subsidized Loan; however, borrowers are responsible for all interest on the loan which begins accruing upon disbursement.

Promissory notes for all student loans can be completed online at www.studentloans.gov. Students must sign an award offer for the amount they wish to borrow. Loan application indicating the amount to be borrowed. Parent Plus promissory notes can be completed online at www.studentloans.gov.

Pathways for Academic Career Employment (PACE) provides a pathway navigator who assists participants in identifying potential barriers to success and minimizes obstacles by connecting students to appropriate resources. This program enables students to access funding for training and provides extra support services to help students successfully complete their program.

The Southwestern Community College Education Foundation is a private, non-profit foundation which serves the students of Southwestern. Additional information and applications for scholarships are available at the Education Foundation office or online at www.swcc.iowa.edu/scholarships.

Veterans’ Educational Assistance is based on discharge from active military service under “other than dishonorable” conditions for a minimum period specified by law. Men and women veterans with similar service are entitled to the same veteran benefits.

Honorable and general discharges qualify a veteran for most Veterans’ Affairs (VA) benefits. Educational benefits under the Montgomery GI Bill, however, require an honorable discharge. Those who enlisted in the military after September 7, 1980, and officers commissioned or who entered military service after October 16, 1981, must have completed two years of active duty or the full period of their initial service obligation to be eligible for most VA benefits. Veterans with service-connected disabilities or those discharged for disability or hardship near the end of their service obligation are not held to this provision. Also, the provision does not apply to participation in veterans insurance programs.

If you have questions regarding your eligibility, call 888.GI.BILL.

Adjustment of Awards
Students will be awarded grants, loans, and work-study based on need and enrollment status (full-time, three-quarter, half-time or less than half-time). If a student drops or adds a class before aid has been disbursed and that results in a change in the student’s enrollment status, the student’s aid will be decreased or increased accordingly. After aid has been disbursed or the end of the business office’s refund period (whichever occurs later), no adjustments will be made unless a student never begins attendance in a class. All financial aid awards are subject to change pending the final notification of funds available to Southwestern for federal and state aid programs. Awards may be adjusted, as well, if the student receives additional resources and it necessitates a change in the student’s award packet. The college assumes no liability for reductions in other types of public assistance due to financial aid received.

Title IV Funds Paying for Course Repeats
If a student repeats a course they have passed during their first attempt, student financial aid may be used for a second attempt; however, financial aid cannot be used beyond a second attempt when a student has previously received a passing letter grade. For this purpose, a passing grade means any grade higher than an “F”; regardless of any program policy requiring a higher grade or measure to have been considered to have passed the course. The retaken course will count towards a student’s enrollment status and the student may be awarded Title IV aid for the enrollment status based on inclusion of the course. Title IV funds may be used to repeat courses that have previously been failed. Exception: If a student is enrolled in a group of courses and they fail a course(s) in the group, and the program requires the student to retake the entire group of courses, financial aid may only be used to retake the course(s) failed, and cannot be used on any of the other courses in the group that were passed.

Disbursement of Aid to Student Accounts
All financial aid administered by the College, except for Federal Work-Study and other employment, will be disbursed by crediting the funds directly to students’ accounts each semester or payment period. Federal Student Aid program funds can only be credited towards allowable charges, which include tuition, fees, and room and board (if the student lives
Satisfactory Academic Progress (SAP) Requirements

Students who receive federal, state or institutional financial aid must maintain satisfactory academic progress as described below to remain eligible to receive financial aid. All students will have their academic records reviewed following each payment period to determine if satisfactory academic progress is being made. The financial aid office will notify students who are not making satisfactory academic progress at the end of each payment period. Each student receiving financial aid is responsible for understanding Satisfactory Academic Progress requirements.

To receive financial aid, students must be working towards a degree or certificate and must earn their degree or certification within a maximum time frame. The maximum time frame for which students may receive aid is 150 percent of the published length of the program measured in credit hours attempted. A student may receive aid for a maximum of two degree programs. Students who are granted "Academic Renewal" will not be exempt from the 150 percent time frame. All hours attempted (course repeats, withdrawals, remedial courses, transfer credits [when applicable to the enrolled program], CLEP, audited courses, additional degrees, course incompletes, changes in majors, non-punitive grades, credit for prior learning, and non-credit to credit) will be counted when calculating the maximum time frame allowed for the program the student is currently working towards. If the borrower receives aid to cover enrollment in more than one program at the same school, the borrower's Maximum Eligibility Period will be calculated based on the published length of the longest program.

For all enrolled students satisfactory academic progress will be measured by the following:

1. Maintain a minimum 2.00 cumulative GPA after each period of enrollment.
2. Students must progress through their declared major at a pace of at least 67 percent per term and/or cumulative credits. The pace at which a student is progressing is calculated by dividing the total number of hours successfully completed by the total number of hours attempted. All hours attempted (course repeats, withdrawals, remedial courses, transfer credits [when applicable to the enrolled program], CLEP, audited courses, credit for prior learning, and non-credit to credit) will be included in calculating the pace of completion.
3. Course repeats and remedial courses will be included as part of the student's enrollment load each academic period; however, the maximum time frame of 150 percent still applies.
4. Credits for audited courses or credits awarded through the College Level Examination Program (CLEP), credit for prior learning, or non-credit to credit evaluation will not be included as part of a student's hours for enrollment status.
5. All transfer credits accepted toward completion of a student's program of study are considered hours attempted and hours completed.

Students not making satisfactory academic progress may be eligible for financial aid warning for one period of enrollment only if they are progressing towards an academic standing consistent with the graduation requirements and they meet the following criteria (exception: students who show zero progress are not eligible for financial aid warning).

1. A student who has a cumulative GPA of 1.25 or above may automatically receive financial aid warning for the following period of enrollment if the student has not received financial aid warning previously.
2. A student who is progressing at a pace less than 67 percent per term and/or cumulative credits may automatically receive financial aid warning for the following period of enrollment if the student has not received financial aid warning previously.

When a student has attempted over 150 percent of the number of credits required for their program, they are placed on financial aid suspension.

Students who show zero progress during a semester, due to all F's, W's and/or I's will have his/her financial aid cancelled for the following period of enrollment and will be denied financial aid until satisfactory academic progress has been made or financial eligibility is regained.

Financial aid eligibility may be regained by one of the following:

1. The student may enroll for a term, or terms, without receiving financial aid until such a time as satisfactory academic progress has been regained. Satisfactory academic progress will be regained when the cumulative grade point average is 2.0 and the student has regained a cumulative completion pace of 67 percent.
2. The student may provide written notification that incompletes have been completed and the grades turned in to Student Services within a timely manner.
Satisfactory academic progress will be re-evaluated at that time; financial aid will not be reinstated until this is done.

3. The student may appeal in writing to the financial aid review committee and may be granted financial aid probation, for one term only, if approved by the majority of the committee.

   a. In the appeal, the student must explain the reason for the failure to meet satisfactory academic progress and also state how they plan to improve. The appeal should be based on extraordinary circumstances beyond the student's control, i.e. death in the family, extended illness, change in employment, etc.; the Financial Aid Committee may request documentation supporting these circumstances before the final determination. Appeals will not be granted for the same extenuating circumstance twice.

   b. The student must include with their appeal, a completed academic plan, signed by their academic advisor or TRIO advisor. Academic plans must demonstrate how a student will meet Satisfactory Academic Progress by a specific point in time. Academic plans will be monitored. If the student is no longer meeting the terms of the academic plan financial aid will be canceled. Academic plans are not considered probation.

   c. The committee may require the student to fulfill specific terms and conditions, such as taking a reduced course load or enrolling in specific courses.

   d. The financial aid review committee will consider each student on an individual basis. The decision of the financial aid review committee is final.

Federal Student Aid program regulations do not provide for academic amnesty or renewal procedures that allow students to apply to have credits attempted and grades earned in previous semesters excluded from the calculation of the student's grade point average. Southwestern Community College will always include courses that apply (whenever taken) toward a student’s program of study.

High school students who have taken college-level courses for credit through Southwestern as “post-secondary” students will have a transcript record. At the time these students enroll as regular students and apply for federal/state aid, the students' transcript will be evaluated, based on the current program enrolled in and credit hours applicable to the program, to determine Satisfactory Academic Progress status. Students who have cumulative grade point averages below the required levels will be placed on warning and will be allowed to have federal/state aid during their first semester of enrollment. These students will be notified of their status; they may also receive additional individual guidance to successfully meet the satisfactory academic progress standards at the end of the semester.

**Definitions of Financial Aid Warning and Financial Aid Probation**

Financial Aid Warning: Status assigned to a student who fails to make SAP. Students may continue to receive Title IV aid for one payment period. No appeal is necessary.

Financial Aid Probation: Status assigned to a student who fails to make SAP and who has appealed and has had eligibility to receive Title IV aid reinstated. The student may receive aid for one payment period and the financial aid review committee may impose conditions for the students continued eligibility. Probation can only be given if the committee can see that the student can make SAP at the end of the next payment period.

**Veterans Affairs (VA)**

Southwestern's veterans advisor will maintain all files for veterans enrolled at the college. It is required that veterans and reservists at Southwestern keep their attendance and grade point average in satisfactory standing. Veterans must meet Southwestern Community College's satisfactory academic progress requirements to remain eligible for benefits. Veterans should report any change of address to the veterans advisor.

Although veterans will not generally receive any VA benefits for at least six weeks after initial registration in a program, they are still expected to pay their semester costs by the first day of class or make other arrangements with the business office. It is Southwestern’s responsibility to notify the VA of the student's status; however, if the student should change his/her original schedule, it is the student's responsibility to contact the veterans advisor. The Veterans Administration will not pay for the student to retake a course for which he/she has received a passing grade, nor will it pay the student for any advance credit he/she has received from prior education. In addition, the student must be pursuing a degree. Any eligibility questions can be directed to 888.GI.BILL1. Completed paperwork in regards to eligibility must be returned to the veterans advisor located in the student services office.
Services

Assessment Services
Career-Related Services
Office of Student Development
Educational Talent Search
Spartan Café
Health Services
Iowa Small Business Development Centers
Iowa Vocational Rehabilitation Services
LRC - Library Services
Online Tutoring
Student Handbook
Student Housing
TRIO-Student Support Services
Students with Special Needs

Student Involvement

Clubs and Organizations
Intercollegiate Athletics
Social and Special Events
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Services

Assessment Services
Students, potential students, and others are offered opportunities for evaluative services in the Assessment Center. A variety of academic and vocational assessments are available on request, enabling examinees to clarify interests and abilities. Referrals are accepted from Iowa Vocational Rehabilitation Services, Workforce Investment Act (WIA) personnel, private industry, and other agencies.

The Assessment Center is a national testing center for CLEP and DSST Examinations. The programs offer subject examinations that correspond to specific college courses. The examinations are administered by appointment. Many colleges and universities award college credit to those who do well on the exams. Pesticide Certification, Iowa Dental Board, and Pearson VUE examinations are administered by appointment.

For additional information or an assessment appointment, call 641.782.7081, ext. 330.

Career-Related Services
One of the primary goals of a college education is to prepare for a satisfying and challenging career. The Workplace Learning Network offers job market information for students and graduates to use for career planning. In addition, the Workplace Learning Network coordinator provides opportunities for students to network with employers and hosts recruiting events on campus.

In addition, Career Coach, an online service, is available to assist students by providing local data on wages, employment, job postings, and associated education and training. Follow the link on www.swcciowa.edu/careerservices to visit Career Coach. For more information, contact SWCC’s Workplace Learning Network coordinator at 641.782.1573.

Office of Student Development
SWCC’s director of student development provides a wide range of services to help students gain the most benefit from their college experience. This guidance may involve academic counseling, academic planning, and transfer planning or adjusting to college life.

Students who experience difficulty or dissatisfaction with their chosen fields of training are encouraged to meet with an advisor/admissions representative. Assistance is also available to all students who desire help in acquiring better study habits, time management, selecting a transfer school or for referral to community resources. For additional information, contact the director of student development at 641.782.7081, ext. 458.

Educational Talent Search
Educational Talent Search (ETS) is a TRIO program federally funded through the U.S. Department of Education. ETS provides junior high and high school students with services to enhance student learning, facilitate personal development, and expand academic opportunities.

The ETS program focuses on encouraging and assisting students in reaching their academic and personal goals by helping them stay in school and enroll in a post-secondary school of their choice. For additional information, call 641.782.7081, ext. 392.

Spartan Café
The Spartan Café, located in the Student Center, serves from 7 a.m. to 7 p.m. Monday through Friday during the school year. Summer hours are 7:30 a.m.–1:30 p.m. until July 1. Selections include a variety of choices including a grill, a salad bar, a deli, a pizza station, and stir fry. Students and staff may pay as they go or purchase Café Cash on a meal card. Students living on campus will receive a meal card as part of their student housing plan.

Health Services
The Greater Regional Medical Clinic, 1610 West Townline Street, Suite 200, 641.782.2131, has been designated as the official agency to provide health services for Southwestern Community College students. The clinic will cooperate with the college in attending to the health needs of students who require professional medical attention. Any medical service provided is at the expense of the recipient.

Iowa Small Business Development Centers
SWCC is host to the South Central Iowa Regional Center of the Iowa Small Business Development Centers (SBDC). The Centers provide technical assistance to existing small business and entrepreneurs through individualized counseling and non-credit classes and workshops. These Centers are the only nationally accredited entrepreneurial development programs in Iowa. Each Regional Center encourages unique local efforts to meet small business needs in the area. The South Central Regional Center develops and maintains partnerships among community organizations and local, state and federal agencies, providing a focal point for broad networks of public and private resources at the local level. SBDC is funded in part through a cooperative agreement with the U.S. Small Business Administration. All programs are extended to the public on a non-discriminatory basis. For additional information, call 641.782.1483 or go to www.swcciowa.edu/sbdc.

Iowa Vocational Rehabilitation Services
Iowa Vocational Rehabilitation offers services which are available to individuals with disabilities attending Southwestern Community College. These services include: medical evaluation, counseling, vocational evaluations, physical restoration, vocational planning, academic and career education, and training. Rehabilitation Services also assists students in finding suitable employment. Those interested in the eligibility requirements of this agency should contact the rehabilitation counselor assigned to the person’s high school or the counselors at the office of Vocational Rehabilitation in the Technical Center I at Southwestern. For additional information, call 641.782.7081, ext. 409.

LRC - Library Services
Students, faculty, staff and area residents are encouraged to make full use of the library facilities for study, research and class preparation. The SWCC library provides access to information in a wide array of formats to support all programs offered at the college. In addition to the book and periodical collections, the library has the audiovisual materials and equipment used to support the curriculum. Computers, laser printer, scanner, televisions, DVD players, music keyboards, photocopier, collaboration areas (or stations), and a wireless network are available.

The library’s Web site provides access to the library online catalog, electronic books and databases, subject guides and tutorials. The library staff is available to help students conduct research and gather resources for classes. The staff may be contacted by telephone, email or online chat to answer questions and help guide research.

You may also access information from other library collections through state and national interlibrary loan networks.
Online Tutoring
SMARTTHINKING offers real-time online tutoring with "e-instructors" and homework help for core courses and skills 24 hours a day, seven days a week. Students can access live tutorials across all subjects, math, accounting, statistics, and economics, as well as a full range of study resources, including writing manuals, sample problems, research tools, and study skills manuals. Students can access the service from wherever they have a connection to the Internet. SMARTTHINKING is not an answering or proofreading/editing service. Students may access SMARTTHINKING by logging into Southwestern eCompanion or online courses.

Placement Report
Southwestern compiles an annual Graduate Placement Report to guide prospective students in making informed decisions regarding program selection.

Student Handbook
The Southwestern Student Handbook provides each student with pertinent information about Southwestern. It is the responsibility of each student to be familiar with its contents and to act within its framework. For the most recent version of this document, please visit www.swcsciowa.edu/handbook. Additionally, Southwestern makes available all student “right-to-know” information through the SWCC Web site at www.swcsciowa.edu/about/consumer-information.

Student Housing
Southwestern Community College provides student housing for those wishing to live in dormitories. These facilities are conveniently located on campus. The dormitories include these amenities: a meal card, a free membership to the Southern Prairie YMCA, Internet access in each room, laundry facilities, and free cable television. For additional information, call 641.782.7081, ext. 555.

A list of off-campus options is available at the Creston Chamber of Commerce’s Web site at www.crestoniowachamber.com.

TRIO-Student Support Services
Southwestern Community College offers the Student Support Services (SSS) program through a TRIO grant from the U.S. Department of Education. The TRIO-Student Support Services program enhances the institution’s commitment to first-generation, low-income students and students with disabilities by encouraging students to strive toward their academic and personal goals. TRIO-SSS provides support services designed to increase retention, graduation, and transfer rates.

Services offered:
» Tutoring
» Academic/Career Advising
» Academic Skills Workshops
» Transfer Assistance
» Scholarship/Grant Assistance
» Cultural/Social Activities

All services are FREE! To be eligible for Student Support Services, students must meet at least one of the following:
» First generation college student- (Neither parent has a 4-year college degree) or
» Low-income individual- (Based on Federal Financial Aid/Taxable Income) or
» Student with a documented disability

The TRIO-Student Support Services offices are located in the Instructional Center. For additional information, call 641.782.1360.

Students with Special Needs
Southwestern provides a variety of accommodations for qualified students with disabilities. Services are designed to enhance the student’s abilities and are based upon a student’s individual needs.

Southwestern makes every effort to assure that qualified students with disabilities have equal access to all services. Students requesting special accommodations are urged to contact the director of student development at 641.782.7081, ext. 458, to initiate the process of obtaining accommodations prior to the start of the semester. In order to receive accommodations students should:

A. Complete an Application for Accommodation:
1. To request accommodation(s), a student with a disability shall submit an application in approved form to the director of student development:
   a. specifying the nature of the claimed physical or mental disability,
   b. specifying his/her functional limitations with respect to the claimed disability,
   c. specifying the nature of the requested accommodation(s), and
   d. submitting current professional evidence documenting the disability; such documentation must verify the applicant’s need for the specific accommodation requested.

2. A specific accommodation plan cannot be implemented until the student has supplied all information and documentation specified immediately above; the Application for Accommodation should be completed before the beginning of the semester, or as early in the semester as possible, to allow sufficient time to develop and implement an accommodation plan which will be useful to the applicant for admission or student with a disability; the later in the semester the application process begins, the less likely an accommodation plan can be fully implemented to accommodate the student’s needs within that semester; accommodations will not be retroactive within a semester.

B. Applications for Accommodation Decisions:
1. Upon receipt of a complete application with full documentation, the director of student development, individually or in consultation with appropriate deans, instructors, and medical or other personnel retained by the College, and after consultation with the applicant for admission or student with a disability shall make a determination regarding the requested accommodation.
2. Said determination shall be made within ten (10) working days.
3. If accommodation(s) are granted, the director of student development will formally document the accommodation(s) on the Academic Accommodation form to be signed by the director of student development and the student.
4. The documentation will be kept confidential and will only be shared with college personnel on a need-to-know basis with the consent of the student. However, the student shall be obligated
to share a copy of the accommodation plan with appropriate college personnel who must necessarily be involved in implementation of the plan.

5. If the initial accommodations requested are found to be unworkable for legitimate reasons or other types of accommodations are found to be more appropriate, the director of student development, the student and other appropriate college personnel will be involved in making the appropriate changes.

C. Appeals

1. Students with disabilities who believe they have been discriminated against on the basis of their disability may receive a review of their complaint as follows:

   a. The complainant should submit a letter to the director of student development that clearly and specifically sets forth the nature of the complaint. The submission of the complaint shall be made within 14 calendar days following the incident. The complaint letter should include: what the issue is, when it occurred, where it occurred, and who was involved. The Director shall investigate the circumstances of the complaint and shall attempt to resolve the problem and render a timely decision.

   b. If the complainant is unsatisfied with the director's decision, he/she may request that the dean of student services review the complaint. The dean of student services will meet with the director of student development and the complainant to try to resolve the issue within five (5) calendar days.

1. When resolution is not reached or is not practical through this initial process, the following steps may be taken:

2. The complainant shall obtain a grievance form from the educational equity coordinator and/or complete a written statement within five (5) calendar days of the initial complaint or of the decision of the dean of student services that includes the date and location of the occurrence, party or parties involved, names of witnesses, the facts and/or rationale of the complaint, and the corrective action sought. The complainant may also file a complaint and seek remedy at any time through the Iowa Civil Rights Commission, the Regional VII Office of Civil Rights, or other appropriate agencies.

3. The educational equity coordinator shall begin an immediate formal investigation of the complaint. The complainant will suffer no retaliation and the right to confidentiality of both the complainant and accused will be respected to the fullest extent possible, but allowing for full investigation. Following the investigation the equity coordinator shall make a full report to the chief executive officer.

4. The chief executive officer shall review the matter in consultation with the equity coordinator and any necessary action will be taken to correct behavior and impose sanctions if warranted.

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**Student Involvement**

**Clubs and Organizations**

Chartered clubs and organizations, which meet the mutual interests and needs of various student groups, are actively supported at Southwestern. Such groups participate in various areas, such as music, politics, departmental or professional subject groups, and social activities. Co-curricular activities are an integral part of student life at Southwestern Community College. Following is a list of clubs and organizations:

- Ag Club
- Art Club
- Auto Collision Repair Club
- Automotive Repair Technology Club
- Business Professional of America (BPA)
- Carpentry Club
- Computer Club
- "The Crew" Electrical Technology Club
- Disc Golf Club
- Drama Club
- Multicultural Club
- Nursing Club
- Phi Theta Kappa (PTK)
- PRIDE Club
- Psychology Club
- Student Ambassadors
- Student Senate
- Students in Free Enterprise (SIFE)
- Welding Club
- Music

**Intercollegiate Athletics**

Intercollegiate athletics are an integral part of student life at Southwestern. Varsity teams compete in these sports: men's basketball, baseball, women's basketball, men's & women's bowling, softball, volleyball, men's & women's cross country, men's & women's track and field, men's & women's golf, men's & women's sports shooting, and dance team. Competition is scheduled against junior colleges in the Midwest in each sport. Athletes must meet the eligibility requirements of the National Junior College Athletic Association. Some athletic scholarships are provided but are limited by conference rules to tuition, books, and fees. All questions concerning athletic eligibility, participation, financial aid, etc. should be referred directly to the athletic director at 641.782.7081, ext. 459.

**Social and Special Events**

The student activities office plans and coordinates a variety of social, educational, cultural and recreational activities, and special events.

All planning and scheduling of any such event should be initiated through the college's student activities coordinator at 641.782.7081, ext. 437.

**Student Senate**

At the beginning of each fall term, a Student Senate is elected by the student body of Southwestern and is the official representative government of the students. The main purpose of the Senate is to provide a means of organized student expression within the college and to encourage and promote interest in college affairs and activities.

Clubs/organizations must select one Student Senate member and one alternate. Representatives are selected by each club/organization and submitted to the Student Senate office before the first Student Senate
meeting of each academic year. In the event that a senator or alternate is unable to complete his/her term, the club/organization must select a new representative and notify the Student Senate office within two weeks of the position vacancy.

Any student who wishes to participate as an active at-large member of the Student Senate may do so by submitting a completed Student Senate application and election petition with the signatures of at least 15 current SWCC students. To become an active at-large member, application materials must be turned in to the Student Senate office prior to the first meeting of the fall semester. For additional information, call 641.782.7081, ext. 413.
Academics

**Arts and Sciences/College Transfer**
- Associate of Arts (AA) Degree
- Associate of Science (AS) Degree
- Associate of General Studies (AGS) Degree
- College and University Transfer Information

**Career-Related Programs**
- Accounting
- Accounting and Information Technology
- Administrative Office Technology
- Agricultural Business
- Auto Collision Repair/Refinish
- Automotive Repair/Automotive Repair Technology
- Business Administration
- Carpentry and Building Trades
- Crop Production
- Electrical Technology
- Graphic Design
- Industrial Technology
- Information Technology
- Systems Networking
- Livestock Production
- Management Information Systems
- Nursing Education-Licensed Practical Nursing and Registered Nursing
- Office Skills
- Professional Music
- Web Development
- Welding Technology
**Arts and Sciences/College Transfer**

Southwestern’s arts and sciences program is designed to prepare students for successful transfer to four-year colleges or universities. Courses are offered that meet the requirements of the first two years of college for most disciplines.

Students in the arts and sciences program may earn either the Associate of Arts (AA) degree or the Associate of Science (AS) degree which will transfer to most four-year colleges/universities in the United States and internationally. There are many diverse majors for which the AA or AS degree is beneficial. A student planning to transfer is advised to do the following:

» Contact the college/university to which he/she plans to transfer and request a catalog and other transfer planning materials.
» Review the recommended curriculum for freshmen and sophomores in the student’s area of interest.
» Confer with his/her Southwestern Community College academic advisor about satisfying all transfer requirements.
» Monitor his/her program of study to ensure that all requirements are met.
» Schedule an official campus visit with the admission’s office at the transfer school as early as fall semester of the sophomore year.

**Associate of Arts (AA) Degree**

To obtain the Associate of Arts degree, students are required to take courses in six areas: communications, humanities, mathematics, sciences, social sciences, and physical education/wellness. Students can select electives based on an area of interest to round out the degree. Completion of 64 credits with a minimum GPA of 2.0 is required to graduate. The following outline is a list of arts and sciences courses that make up the Associate of Arts degree.

### Core Requirements - 43 credits (Sections 1-5)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience*</td>
<td>1</td>
</tr>
</tbody>
</table>

*All new freshmen students are required to enroll in SDV 108, The College Experience (1 credit). Transfer students who have earned 24 credits or less or have a GPA of 2.0 or below are also required to take the course. The purpose of this course is to help students develop academic success skills by connecting them to college resources and facilitating participation in college culture. This course will count toward elective credits (Section 6).

#### 1. Communications

**9 credits**

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 105</td>
<td>Composition I**</td>
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<tr>
<td>ENG 106</td>
<td>Composition II**</td>
<td>3</td>
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<td>ENG 221</td>
<td>Creative Writing</td>
<td>3</td>
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<tr>
<td>ENG 238</td>
<td>Creative Writing: Non-Fiction</td>
<td>3</td>
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<tr>
<td>SPC 101</td>
<td>Fundamentals of Oral Communication**</td>
<td>3</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
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**Required**

#### 2. Humanities (continued)

**9 credits**

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<th>Course Name</th>
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<tbody>
<tr>
<td>HIS 257</td>
<td>African American History</td>
<td>3</td>
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<tr>
<td>HIS 268</td>
<td>American Experience in Vietnam</td>
<td>3</td>
</tr>
<tr>
<td>HUM 164</td>
<td>Non-Western Culture - Japan</td>
<td>3</td>
</tr>
<tr>
<td>LIT 101</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 110</td>
<td>American Literature to Mid-1800’s</td>
<td>3</td>
</tr>
<tr>
<td>LIT 111</td>
<td>American Literature since Mid-1800’s</td>
<td>3</td>
</tr>
<tr>
<td>LIT 140</td>
<td>British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LIT 141</td>
<td>British Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LIT 161</td>
<td>The Short Story</td>
<td>3</td>
</tr>
<tr>
<td>LIT 177</td>
<td>Dramatic Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 178</td>
<td>Mythological and Biblical Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 184</td>
<td>Young Adult Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 210</td>
<td>The Graphic Novel</td>
<td>3</td>
</tr>
<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 200</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 201</td>
<td>Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 204</td>
<td>History of Rock and Roll</td>
<td>3</td>
</tr>
<tr>
<td>PHI 101</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
<td>3</td>
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<tr>
<td>REL 101</td>
<td>Survey of World Religions</td>
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### 3. Mathematics and Sciences

**8 credits**

<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 105</td>
<td>Introductory Biology (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 112</td>
<td>General Biology I (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 113</td>
<td>General Biology II (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 130</td>
<td>Animal Biology (w/lab)</td>
<td>4</td>
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**Student must take at least one science course from the courses listed:**
### 3. Mathematics and Sciences (continued)

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<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 146</td>
<td>Genetics</td>
<td>3</td>
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<tr>
<td>BIO 151</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>BIO 157</td>
<td>Human Biology (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 162</td>
<td>Essentials of Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 163</td>
<td>Essentials of Anatomy and Physiology (w/lab)</td>
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</tr>
<tr>
<td>BIO 168</td>
<td>Human Anatomy and Physiology I (w/lab)</td>
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</tr>
<tr>
<td>BIO 173</td>
<td>Human Anatomy and Physiology II (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 186</td>
<td>Microbiology (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>CHM 112</td>
<td>Introduction to Chemistry (w/lab)</td>
<td>4</td>
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<tr>
<td>CHM 166</td>
<td>General Chemistry I (w/lab)</td>
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<tr>
<td>CHM 176</td>
<td>General Chemistry II (w/lab)</td>
<td>5</td>
</tr>
<tr>
<td>CHM 261</td>
<td>Organic Chemistry I (w/lab)</td>
<td>4</td>
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<tr>
<td>CHM 271</td>
<td>Organic Chemistry II (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 102</td>
<td>Introduction to Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ENV 111</td>
<td>Environmental Science (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 154</td>
<td>Introduction to Renewable Energy</td>
<td>3</td>
</tr>
<tr>
<td>PHS 125</td>
<td>Physical Science (w/lab)</td>
<td>4</td>
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<tr>
<td>PHY 162</td>
<td>College Physics I (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>PHY 172</td>
<td>College Physics II (w/lab)</td>
<td>4</td>
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<tr>
<td>PHY 212</td>
<td>Classical Physics I (w/lab)</td>
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<tr>
<td>PHY 222</td>
<td>Classical Physics II (w/lab)</td>
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</table>

*Student must take four mathematics credits from the courses listed:*

- MAT 110  Math for Liberal Arts  3
- MAT 120  College Algebra  3
- MAT 127  College Algebra and Trigonometry  5
- MAT 134  Trigonometry and Analytic Geometry  3
- MAT 156  Statistics  3
- MAT 210  Calculus I  4
- MAT 216  Calculus II  4
- MAT 219  Calculus III  4
- MAT 225  Differential Equations  3

### 4. Social Sciences 9 credits

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ANT 105</td>
<td>Cultural Anthropology</td>
<td>3</td>
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<tr>
<td>CRJ 200</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>ECN 120</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECN 130</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>GEO 121</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>HIS 151</td>
<td>U.S. History to 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIS 152</td>
<td>U.S. History since 1877</td>
<td>3</td>
</tr>
<tr>
<td>HIS 201</td>
<td>Iowa History</td>
<td>3</td>
</tr>
<tr>
<td>POL 111</td>
<td>American National Government</td>
<td>3</td>
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<tr>
<td>POL 112</td>
<td>American State and Local Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY 111</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 121</td>
<td>Developmental Psychology</td>
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### 4. Social Sciences (continued)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PSY 171</td>
<td>Health Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 241</td>
<td>Abnormal Psychology</td>
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<tr>
<td>PSY 251</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSY 261</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
<tr>
<td>SOC 110</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>SOC 115</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SOC 120</td>
<td>Marriage and Family</td>
<td>3</td>
</tr>
<tr>
<td>SOC 125</td>
<td>Understanding Parenting</td>
<td>3</td>
</tr>
<tr>
<td>SOC 200</td>
<td>Minority Group Relations</td>
<td>3</td>
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</tbody>
</table>

### 5. Distributed Requirements 8 credits

Select distributed requirements from any of the courses in categories 1, 2, 3, and 4.

### 6. Electives 19 credits

A maximum of 16 credits of career and technical education may be applied to the elective category.

### 7. Physical Education 2 credits

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PEA 112</td>
<td>Basketball</td>
<td>1</td>
</tr>
<tr>
<td>PEA 121</td>
<td>Circuit Wellness</td>
<td>1</td>
</tr>
<tr>
<td>PEA 131</td>
<td>Disc Golf</td>
<td>1</td>
</tr>
<tr>
<td>PEA 176</td>
<td>Volleyball I</td>
<td>1</td>
</tr>
<tr>
<td>PEA 187</td>
<td>Weight Training I</td>
<td>1</td>
</tr>
<tr>
<td>PEA 192</td>
<td>Walking I</td>
<td>1</td>
</tr>
<tr>
<td>PEV 115</td>
<td>Varsity Baseball</td>
<td>1</td>
</tr>
<tr>
<td>PEV 121</td>
<td>Varsity Basketball, Men</td>
<td>1</td>
</tr>
<tr>
<td>PEV 122</td>
<td>Varsity Basketball, Women</td>
<td>1</td>
</tr>
<tr>
<td>PEV 125</td>
<td>Varsity Bowling</td>
<td>1</td>
</tr>
<tr>
<td>PEV 130</td>
<td>Varsity Cross Country</td>
<td>1</td>
</tr>
<tr>
<td>PEV 133</td>
<td>Varsity Track</td>
<td>1</td>
</tr>
<tr>
<td>PEV 140</td>
<td>Varsity Golf</td>
<td>1</td>
</tr>
<tr>
<td>PEV 145</td>
<td>Sports Shooting</td>
<td>1</td>
</tr>
<tr>
<td>PEV 156</td>
<td>Drill Team</td>
<td>1</td>
</tr>
<tr>
<td>PEV 160</td>
<td>Varsity Softball</td>
<td>1</td>
</tr>
<tr>
<td>PEV 170</td>
<td>Varsity Volleyball</td>
<td>1</td>
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</tbody>
</table>

### Total AA Degree Requirements - 64 credits

Note: Developmental courses will not be counted toward an AA degree.
## Associate of Science (AS) Degree

To obtain the Associate of Science degree, students are required to take courses in five academic areas—communications, humanities/social sciences, mathematics, sciences, and physical education/wellness—with an emphasis in mathematics or science. Students can select electives based on an area of interest to round out the degree. Completion of 64 credits with a minimum GPA of 2.0 is required to graduate. The following outline is a list of arts and sciences courses that make up the Associate of Science degree.

### Core Requirements - 38 credits (Sections 1-3)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 108</td>
<td>The College Experience*</td>
<td>1</td>
</tr>
</tbody>
</table>

*All new freshmen students are required to enroll in SDV 108, The College Experience (1 credit). Transfer students who have earned 24 credits or less or have a GPA of 2.0 or below are also required to take the course. The purpose of this course is to help students develop academic success skills by connecting them to college resources and facilitating participation in college culture. This course will count toward elective credits (Section 5).

#### 1. Communications 9 credits

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 105</td>
<td>Composition I**</td>
</tr>
<tr>
<td>ENG 106</td>
<td>Composition II**</td>
</tr>
<tr>
<td>ENG 221</td>
<td>Creative Writing</td>
</tr>
<tr>
<td>ENG 238</td>
<td>Creative Writing Non-Fiction</td>
</tr>
<tr>
<td>SPC 101 or SPC 112</td>
<td>Fundamentals of Oral Communication** or Public Speaking**</td>
</tr>
<tr>
<td>SPC 122</td>
<td>Interpersonal Communication</td>
</tr>
</tbody>
</table>

**Required

#### 2. Humanities and Social Sciences 9 credits

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 105</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ART 101</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td>ART 203</td>
<td>Art History I</td>
</tr>
<tr>
<td>ART 204</td>
<td>Art History II</td>
</tr>
<tr>
<td>ART 207</td>
<td>Survey of Art</td>
</tr>
<tr>
<td>CLS 150</td>
<td>Latin American History &amp; Culture</td>
</tr>
<tr>
<td>FLS 141</td>
<td>Elementary Spanish I</td>
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<tr>
<td>FLS 142</td>
<td>Elementary Spanish II</td>
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<tr>
<td>HIS 110</td>
<td>Western Civilization: Ancient to Early Modern</td>
</tr>
<tr>
<td>HIS 111</td>
<td>Western Civilization: Early Modern to Present</td>
</tr>
<tr>
<td>HIS 142</td>
<td>Middle Eastern Studies</td>
</tr>
<tr>
<td>HIS 257</td>
<td>African American History</td>
</tr>
<tr>
<td>HIS 268</td>
<td>American Experience in Vietnam</td>
</tr>
<tr>
<td>HUM 164</td>
<td>Non-Western Culture - Japan</td>
</tr>
<tr>
<td>LIT 101</td>
<td>Introduction to Literature</td>
</tr>
<tr>
<td>LIT 110</td>
<td>American Literature to Mid-1800's</td>
</tr>
<tr>
<td>LIT 111</td>
<td>American Literature since Mid-1800's</td>
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<tr>
<td>LIT 140</td>
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<td>LIT 141</td>
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<tr>
<td>LIT 161</td>
<td>The Short Story</td>
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<tr>
<td>LIT 177</td>
<td>Dramatic Literature</td>
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<tr>
<td>LIT 178</td>
<td>Mythological and Biblical Literature</td>
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<td>LIT 184</td>
<td>Young Adult Literature</td>
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#### 2. Humanities and Social Sciences (continued) 9 credits

<table>
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<th>Course #</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>LIT 210</td>
<td>The Graphic Novel</td>
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<tr>
<td>MUS 100</td>
<td>Music Appreciation</td>
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<td>MUS 200</td>
<td>Music History I</td>
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<tr>
<td>MUS 201</td>
<td>Music History II</td>
</tr>
<tr>
<td>MUS 204</td>
<td>History of Rock and Roll</td>
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<tr>
<td>PHI 101</td>
<td>Introduction to Philosophy</td>
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<tr>
<td>PHI 105</td>
<td>Introduction to Ethics</td>
</tr>
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<td>REL 101</td>
<td>Survey of World Religions</td>
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**Required

#### 3. Mathematics and Sciences 20 credits

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<th>Course #</th>
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<tbody>
<tr>
<td>BIO 105</td>
<td>Introductory Biology (w/lab)</td>
</tr>
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<td>BIO 112</td>
<td>General Biology I (w/lab)</td>
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<tr>
<td>BIO 113</td>
<td>General Biology II (w/lab)</td>
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<tr>
<td>BIO 130</td>
<td>Animal Biology (w/lab)</td>
</tr>
<tr>
<td>BIO 146</td>
<td>Genetics</td>
</tr>
<tr>
<td>BIO 151</td>
<td>Nutrition</td>
</tr>
<tr>
<td>BIO 157</td>
<td>Human Biology (w/lab)</td>
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**Required

Student must take at least one course from mathematics and one course from sciences.
3. Mathematics and Sciences (continued)

<table>
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<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 162</td>
<td>Essentials of Anatomy and Physiology</td>
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<td>BIO 163</td>
<td>Essentials of Anatomy and Physiology (w/lab)</td>
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<td>BIO 168</td>
<td>Human Anatomy and Physiology I (w/lab)</td>
<td>4</td>
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<tr>
<td>BIO 173</td>
<td>Human Anatomy and Physiology II (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>BIO 186</td>
<td>Microbiology (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>CHM 112</td>
<td>Introduction to Chemistry (w/lab)</td>
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<tr>
<td>CHM 166</td>
<td>General Chemistry I (w/lab)</td>
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<tr>
<td>CHM 176</td>
<td>General Chemistry II (w/lab)</td>
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<tr>
<td>CHM 261</td>
<td>Organic Chemistry I (w/lab)</td>
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<tr>
<td>CHM 271</td>
<td>Organic Chemistry II (w/lab)</td>
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<tr>
<td>ENV 102</td>
<td>Introduction to Sustainability</td>
<td>3</td>
</tr>
<tr>
<td>ENV 111</td>
<td>Environmental Science (w/lab)</td>
<td>4</td>
</tr>
<tr>
<td>ENV 154</td>
<td>Introduction to Renewable Energy</td>
<td>3</td>
</tr>
<tr>
<td>PHS 125</td>
<td>Physical Science (w/lab)</td>
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<tr>
<td>PHS 172</td>
<td>College Physics I (w/lab)</td>
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<td>PHS 212</td>
<td>Classical Physics I (w/lab)</td>
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<tr>
<td>PHS 222</td>
<td>Classical Physics II (w/lab)</td>
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<td>MAT 110</td>
<td>Math for Liberal Arts</td>
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<tr>
<td>MAT 120</td>
<td>College Algebra</td>
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<tr>
<td>MAT 127</td>
<td>College Algebra and Trigonometry</td>
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<tr>
<td>MAT 134</td>
<td>Trigonometry and Analytic Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MAT 156</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MAT 210</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MAT 216</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MAT 219</td>
<td>Calculus III</td>
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</tr>
<tr>
<td>MAT 225</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
</tbody>
</table>

4. Distributed Requirements 4 credits

5. Electives 20 credits

6. Physical Education 2 credits

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEH 110</td>
<td>Personal Wellness (may be used as elective credit if PE requirement is satisfied.)</td>
<td>2</td>
</tr>
<tr>
<td>PEH 111</td>
<td>Personal Wellness (may be used as elective credit if PE requirement is satisfied.)</td>
<td>3</td>
</tr>
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</table>

Each of the following one credit classes can be taken twice to meet the two credit degree requirement.

<table>
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<th>Course #</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PEA 112</td>
<td>Basketball</td>
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</tr>
<tr>
<td>PEA 121</td>
<td>Circuit Wellness</td>
<td>1</td>
</tr>
<tr>
<td>PEA 131</td>
<td>Disc Golf</td>
<td>1</td>
</tr>
<tr>
<td>PEA 176</td>
<td>Volleyball I</td>
<td>1</td>
</tr>
<tr>
<td>PEA 187</td>
<td>Weight Training I</td>
<td>1</td>
</tr>
<tr>
<td>PEA 192</td>
<td>Walking I</td>
<td>1</td>
</tr>
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<td>PEV 115</td>
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<td>PEV 122</td>
<td>Varsity Basketball, Women</td>
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<td>Varsity Bowling</td>
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<td>Varsity Track</td>
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<td>PEV 145</td>
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<td>PEV 170</td>
<td>Varsity Volleyball</td>
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Total AS Degree Requirements - 64 credits

Note: Developmental courses will not be counted toward an AS degree.
## Associate of General Studies (AGS) Degree

The Associate of General Studies (AGS) degree is a broad course of study designed for those students who have unique educational needs. Students should check with potential employers and institutions to which they might transfer to determine if the AGS degree will be compatible with their future goals.

### Core Requirements - 15 credits (Sections 1-4)

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<td>SDV 108</td>
<td>The College Experience*</td>
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*All new freshmen students are required to enroll in SDV 108, The College Experience (1 credit). Transfer students who have earned 24 credits or less or have a GPA of 2.0 or below are also required to take the course. The purpose of this course is to help students develop academic success skills by connecting them to college resources and facilitating participation in college culture. This course will count toward elective credits (Section 5). |

#### 1. Communications

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<td>Survey of Art</td>
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<td>Latin American History and Culture</td>
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<td>Western Civilization: Ancient to Early Modern</td>
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<td>BIO 151</td>
<td>Nutrition</td>
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<td>BIO 157</td>
<td>Human Biology (w/lab)</td>
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<td>BIO 162</td>
<td>Essentials of Anatomy and Physiology</td>
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<td>Essentials of Anatomy and Physiology (w/lab)</td>
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### 4. Social Sciences  
3-6 credits

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<td>CRJ 200</td>
<td>Criminology</td>
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<td>ECN 120</td>
<td>Principles of Macroeconomics</td>
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<td>Principles of Microeconomics</td>
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<td>GEO 121</td>
<td>World Regional Geography</td>
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<td>U.S. History to 1877</td>
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<td>U.S. History since 1877</td>
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<td>HIS 201</td>
<td>Iowa History</td>
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<td>POL 111</td>
<td>American National Government</td>
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<td>POL 112</td>
<td>American State and Local Government</td>
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<td>PSY 111</td>
<td>Introduction to Psychology</td>
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<td>PSY 251</td>
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<td>SOC 110</td>
<td>Introduction to Sociology</td>
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<td>SOC 120</td>
<td>Marriage and Family</td>
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<td>Understanding Parenting</td>
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<td>SOC 200</td>
<td>Minority Group Relations</td>
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### 5. Electives  
49 credits

**Total AGS Degree Requirements - 64 credits**
College and University Transfer Information

The following pages contain courses of study which are suggested guides to obtaining an Associate of Arts or an Associate of Science degree from Southwestern Community College. They also illustrate how Southwestern's courses meet the requirements for various majors at selected four-year institutions in Iowa. The outlines are intended as guidelines for students planning to enter the profession listed. The list is not all inclusive, and students should consult with their advisors concerning requirements for their individual bachelor's degree programs.

Students must assume responsibility for their own course of study because of possible changes after printing. Students are advised to correspond with their advisors, the admissions office, or the department at the college where they plan to transfer.

Developmental courses may be required before students can take college-level English or mathematics courses.

College Transfer Majors
Below is a partial list of majors students could select at four-year institutions after their freshman and sophomore years at Southwestern.

» Accounting
» Agricultural Business
» Agricultural Education
» Agronomy
» Animal Science
» Anthropology
» Architecture
» Art and Design
» Athletic Training
» Biochemistry
» Biology
» Biotechnology
» Botany
» Broadcasting
» Business
» Chemistry
» Child and Family Services
» Child Care
» Chiropractic
» Coaching
» Communication
» Computer Science
» Criminal Justice
» Dietetics - Food and Nutrition
» Early Childhood Education (ECE)
» Earth Science
» Ecology
» Economics
» Elementary Education
» English
» Environmental Studies
» Exercise Science
» Family and Consumer Sciences Education
» Fashion Merchandising
» Finance
» Food Science
» Forestry
» Genetics
» Geography
» Government
» History
» Horticulture
» Human Services
» International Business
» Journalism
» Leisure Studies
» Liberal Arts
» Library Science
» Literature
» Management
» Marketing
» Mass Communication
» Mathematics
» Meteorology
» Microbiology
» Mortuary Science
» Music
» Nursing
» Occupational Therapy
» Philosophy
» Physical Education
» Physics
» Political Science
» Pre-Dentistry
» Pre-Engineering
» Pre-Law
» Pre-Medicine
» Pre-Optometry
» Pre-Pharmacy
» Pre-Physical Therapy
» Pre-Physician Assistant
» Pre-Veterinary Medicine
» Psychology
» Public Administration
» Public Relations
» Recreation
» Religion
» Secondary Education
» Social Science
» Social Work
» Sociology
» Spanish
» Special Education
» Speech Communication
» Sports Management
» Statistics
» Theater
» Transportation and Logistics
» Wildlife Biology
» Zoology

The following pages include two-year plans for some of the college's most popular college transfer majors. If a two-year plan is not listed for the major you have chosen, please contact the admissions office or your academic advisor for course planning.
## Agricultural Business

### First Year

#### First Semester

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<tr>
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<th>Course Name</th>
<th>Credits</th>
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<td>AGA 114</td>
<td>Principles of Agronomy</td>
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<td>Survey of the Animal Industry</td>
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<td>General Biology I (w/lab)</td>
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### Second Year

#### First Semester

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<td>BUS 185</td>
<td>Business Law I</td>
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<td>Calculus I</td>
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#### Second Semester

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*Recommended courses for humanities and social sciences requirements include ECN 130 Principles of Microeconomics, HIS 110 Western Civilization: Ancient to Early Modern, HIS 111 Western Civilization: Early Modern to Present, PHI 101 Introduction to Philosophy, and SOC 110 Introduction to Sociology.

## Accounting

### First Year

#### First Semester

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### Second Year

#### First Semester

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#### Second Semester

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Examples of electives include: AGS 305 Livestock Evaluation, AGA 114 Principles of Agronomy, AGB 336 Agricultural Selling, AGA 212 Grain and Forage Crops, AGB 330 Farm Business Management, AGB 235 Introduction to Agriculture Markets, AGS 355 Animal Breeding and Genetics, and CSC 110 Introduction to Computers.

Students considering a pre-vet option may also consider taking other courses at SWCC such as BIO 186 Microbiology, CHM 261 Organic Chemistry I, CHM 271 Organic Chemistry II, and ACC 131 Principles of Accounting I.

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### Biology

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Students considering a pre-vet option may also consider taking other courses at SWCC such as BIO 186 Microbiology, CHM 261 Organic Chemistry I, CHM 271 Organic Chemistry II, and ACC 131 Principles of Accounting I.
# Biotechnology

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**Total 15**

*Recommended humanities courses include PHI 105 Introduction to Ethics, FLS 141 Elementary Spanish I.

**Recommended social sciences courses include ECN 120 Principles of Macroeconomics, ECN 130 Principles of Microeconomics, GEO 121 World Regional Geography, SOC 200 Minority Group Relations.

NOTE: Students are expected to have computer expertise equivalent to CSC 110 Introduction to Computers. Students without this expertise should plan to take this course prior to entry in the program. It is strongly recommended that students majoring in biotechnology take CHM 261 Organic Chemistry I and CHM 271 Organic Chemistry II during their second year.

# Business

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## Criminal Justice

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*Recommended courses for humanities requirement include FLS 141 Elementary Spanish I, FLS 142 Elementary Spanish II, HIS 142 Middle Eastern Studies, HIS 257 African American History, CLS 150 Latin American History and Culture, REL 101 Survey of World Religions. (Elementary Spanish I & II are highly recommended for this area of study.)*

**Recommended courses for sciences requirement include BIO 157 Human Biology, BIO 162 Essentials of Anatomy and Physiology, CHM 112 Introduction to Chemistry.

The following courses may also be used to satisfy the social sciences requirement for the AA degree: PSY 121 Developmental Psychology, PSY 251 Social Psychology, POL 111 American National Government, POL 112 American State and Local Government.
## Early Childhood Education (ECE)

### First Year

#### First Semester

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#### Summer Session

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**Second Year**

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*Required ECE electives are offered through the Iowa Community College Online Consortium: ECE 103 Introduction to Early Childhood Education; ECE 133 Child Health, Safety and Nutrition; ECE 243 Early Childhood Guidance; ECE 158 Early Childhood Curriculum I; ECE 159 Early Childhood Curriculum II; ECE 221 Infant/Toddler Care and Education; ECE 170 Child Growth and Development; and ECE 262 Early Childhood Field Experience.

The following are the Child Development Associate Credential preparation courses (13 credits): ECE 243 Early Childhood Guidance; ECE 133 Child Health, Safety and Nutrition; ECE 103 Introduction to Early Childhood Education; and choose one of the following: ECE 221 Infant/Toddler Care and Education, ECE 158 Early Childhood Curriculum I, ECE 159 Early Childhood Curriculum II; and ECE 106 Child Development Associate Standards.

At least three of the courses defined for the CDA credential must be completed before taking ECE 106 Child Development Associate Standards. The fourth course may be taken before or at the same time as ECE 106 Child Development Associate Standards.

---

## Elementary Education

### First Year

#### First Semester

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#### Second Year

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*It is recommended that education majors take one biological sciences (BIO) and one physical sciences course (CHM, PHS), with at least one containing a lab.

**Students should choose humanities from a variety of areas. For example, students should choose one fine arts course (MUS 100 Music Appreciation or ART 101 Art Appreciation) and a literature course such as LIT 101 Introduction to Literature. Students are encouraged to check with their transfer school about specific requirements.

***Students should choose social science courses from a variety of areas such as POL 111 American National Government, GEO 121 World Regional Geography, U.S. History (HIS 151 U.S. History I or HIS 152 U.S. History II) or Economics (ECN 120 Principles of Macroeconomics or ECN 130 Principles of Microeconomics). Students are encouraged to check with their transfer school about specific requirements.
## Exercise Science

### First Year

#### First Semester

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<td>Math for Liberal Arts</td>
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<td>EXS 101</td>
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<tr>
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<td>Western Civilization: Ancient to Early Modern</td>
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**Total 16**

#### Second Semester

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**Total 18**

### Second Year

#### First Semester

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<td>Care and Prevention of Athletic Injuries</td>
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<td>BIO 162</td>
<td>Essentials of Anatomy &amp; Physiology</td>
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<td>CRJ 100</td>
<td>Introduction to Criminal Justice</td>
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**Total 16**

## Human Services

### First Year

#### First Semester

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### Second Year

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**Total 15**

*Recommended courses for humanities requirement include FLS 141 Elementary Spanish, FLS 142 Elementary Spanish II, HIS 142 Middle Eastern Studies, HIS 257 African American History, CLS 150 Latin American History and Culture, REL 101 Survey of World Religions (Elementary Spanish I & II are highly recommended for this area of study).

**Recommended courses for sciences requirement include BIO 157 Human Biology, BIO 162 Essentials of Anatomy and Physiology, and CHM 112 Introduction to Chemistry.

***Offered online only.
### Mortuary Science

#### First Year

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<td>Principles of Macroeconomics</td>
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<td>Care and Prevention of Athletic Injuries</td>
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*Examples of physical education electives include: PEC 101 Introduction to Coaching, PEC 128 Care and Prevention of Athletic Injuries, PEH 141 First Aid. Please check with advisor for other physical education options.

**It is recommended that education majors take one biological sciences (BIO, ENV) and one physical sciences (CHM, PHS, PHY) course, with at least one containing a lab.
### Pre-Engineering

#### First Year

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### Pre-Medicine

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*Math/science elective may depend on what area of engineering the student plans to pursue. Courses such as BIO 112 General Biology I, BIO 113 General Biology II, MAT 219 Calculus III, and MAT 225 Differential Equations may be chosen to meet the student's transfer needs.*
### Pre-Physical Therapy

#### First Year

#### First Semester

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*Examples of psychology electives include: PSY 121 Developmental Psychology and PSY 241 Abnormal Psychology.*

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### Pre-Physician Assistant

#### First Year

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*Recommended psychology electives include the following: PSY 241 Abnormal Psychology, PSY 251 Social Psychology, and PSY 281 Educational Psychology.

**Recommended sociology electives include the following: SOC 115 Social Problems, SOC 120 Marriage and Family, SOC 125 Understanding Parenting, and SOC 200 Minority Group Relations.

### Secondary Education

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*It is recommended that education majors take one biological sciences (BIO, ENV) and one physical sciences (CHM, PHS, PHY) course, with at least one containing a lab.
## Sports Management

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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 106</td>
<td>Composition II</td>
<td>3</td>
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<tr>
<td>ECN 130</td>
<td>Principles of Microeconomics</td>
<td>3</td>
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<td>MKT 110</td>
<td>Principles of Marketing</td>
<td>3</td>
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<td>MAT 156</td>
<td>Mathematics Requirement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical Education</td>
<td>1</td>
<td></td>
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<tr>
<td></td>
<td>Distributed Requirement*</td>
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<thead>
<tr>
<th>First Semester</th>
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<tbody>
<tr>
<td>BUS 185</td>
<td>Business Law I</td>
<td>3</td>
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<tr>
<td>ACC 131</td>
<td>Principles of Accounting I</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>PEC 108</td>
<td>Sports and Society</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>Humanities Requirement</td>
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<tr>
<td></td>
<td>Social Sciences Requirement</td>
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<table>
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<tbody>
<tr>
<td>PEH 255</td>
<td>Principles of Sports Management</td>
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<td>SPC 101</td>
<td>Fundamentals of Oral Communication</td>
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<td></td>
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<td></td>
<td>Distributed Requirement*</td>
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<tr>
<td></td>
<td>Humanities Requirement</td>
<td>3</td>
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<tr>
<td></td>
<td>Sciences Requirement</td>
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</table>

*Distributed requirements may be selected from the areas of communications, humanities, mathematics and sciences, or social sciences.*
Career-Related Programs

Career and Technical Education Programs
Associate of Applied Science Degrees, Associate of Applied Arts Degrees, Diplomas, or Certificates

Southwestern’s career and technical education programs are designed to provide instruction of a preparatory type in the development of basic skills, safety, technical knowledge, and related information for the purpose of preparing persons for employment.

The skilled trade programs are equipped with labs similar to those in industry. The facilities make possible practical instruction through hands-on experience using the instruments, tools, and equipment used in the field. Instructors are trained and experienced in their field of expertise.

Credits granted in various programs are not necessarily transferable to other institutions. Transfer of credits to a four-year program at another institution will be determined by the four-year institution on the basis that the courses and credits are applicable to the work outlined in the curriculum of that institution.

The Associate of Applied Science or Associate of Applied Arts degree is granted to students who complete two-year career and technical education programs and meet all graduation requirements.

A diploma is awarded upon successful completion of all courses in a career and technical education program of less than two years.

A certificate is awarded following successful completion of a select group of career courses in a four- to six-month format.

Most career and technical education programs require students to begin in August (fall semester). General education electives may be taken anytime.

Career and technical education programs at Southwestern include the following:

» Accounting–Associate of Applied Science Degree
» Accounting and Information Technology–Associate of Applied Science Degree
» Administrative Office Technology–Associate of Applied Science Degree
» Agricultural Business–Associate of Applied Science Degree
» Auto Collision Repair/Refinish–Diploma or Associate of Applied Science Degree
» Automotive Repair/Automotive Repair Technology–Certificate, Diploma, or Associate of Applied Science Degree
» Business Administration–Associate of Applied Science Degree
» Business Leadership–Certificate
» Carpentry and Building Trades–Certificate, Diploma, or Associate of Applied Science Degree
» Crop Production–Associate of Applied Science Degree
» Electrical Technology–Certificate, Diploma, or Associate of Applied Science Degree
» Graphic Design–Associate of Applied Science Degree
» Industrial Technology–Certificate, Diploma, or Associate of Applied Science Degree
» Information Technology Systems Networking–Certificate, Diploma, or Associate of Applied Science Degree
» Livestock Production–Associate of Applied Science Degree
» Management Information Systems–Associate of Applied Science Degree
» Nursing Education–Diploma (LPN) or Associate of Applied Science Degree (RN)
» Office Skills–Diploma
» Professional Music–Associate of Applied Arts Degree
» Web Development–Associate of Applied Science Degree
» Welding Technology–Certificate, Diploma, or Associate of Applied Science Degree
# Accounting

**Award: Associate of Applied Science Degree**

The accounting program is designed to provide students with the fundamentals necessary to obtain entry-level positions for a career in the field of accounting. Program instruction provides students with a systematic approach to analyze and track financial information through the accounts and records of a business. An accounting and information technology degree is also available at Southwestern.

## Year 1

### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
</tr>
<tr>
<td>Principles of Accounting I</td>
<td>ACC 131</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>BUS 102</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Computers</td>
<td>CSC 110</td>
<td>3</td>
</tr>
<tr>
<td>Composition I</td>
<td>ENG 105</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective*</td>
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### Spring Semester

<table>
<thead>
<tr>
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<th>Course #</th>
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<tbody>
<tr>
<td>Principles of Accounting II</td>
<td>ACC 132</td>
<td>4</td>
</tr>
<tr>
<td>Composition II or Business Communications (Business)</td>
<td>ENG 106</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS 121</td>
<td>3</td>
</tr>
<tr>
<td>Intermediate Algebra or higher level mathematics</td>
<td>MAT 101</td>
<td>3</td>
</tr>
<tr>
<td>Business Math and Calculators</td>
<td>BUS 110</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective*</td>
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### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
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</thead>
<tbody>
<tr>
<td>Intermediate Accounting I</td>
<td>ACC 211</td>
<td>3</td>
</tr>
<tr>
<td>Computer Accounting</td>
<td>ACC 311</td>
<td>3</td>
</tr>
<tr>
<td>Business Law I</td>
<td>BUS 185</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>ECN 120</td>
<td>3</td>
</tr>
<tr>
<td>Business/Computer Elective**</td>
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<td>3</td>
</tr>
<tr>
<td>Fundamentals of Oral Communication</td>
<td>SPC 101</td>
<td>3</td>
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### Spring Semester

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<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Cost Accounting</td>
<td>ACC 221</td>
<td>3</td>
</tr>
<tr>
<td>Income Tax Accounting</td>
<td>ACC 261</td>
<td>3</td>
</tr>
<tr>
<td>Pre-Employment Strategies</td>
<td>SDV 153</td>
<td>2</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>ECN 130</td>
<td>3</td>
</tr>
<tr>
<td>Statistics or Quantitative Methods for Business Decision Making</td>
<td>MAT 156</td>
<td>3</td>
</tr>
<tr>
<td>Business Problem Solving</td>
<td>BUS 238</td>
<td>3</td>
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</table>

**AAS Degree Total:** **68.0**

*General education elective options include, but are not limited to:

- Western Civilization: Ancient to Early Modern
  - HIS 110 3
- Western Civilization: Early Modern to Present
  - HIS 111 3
- Introduction to Literature
  - LIT 101 3
- Introduction to Psychology
  - PSY 111 3
- Introduction to Sociology
  - SOC 110 3

**Business/computer elective options include, but are not limited to:

- Payroll Accounting
  - ACC 161 3
- Comprehensive Spreadsheets
  - BCA 152 3
- Comprehensive Databases
  - BCA 167 3
- Introduction to Entrepreneurship
  - BUS 130 3
- Human Relations
  - BUS 161 3
- Quantitative Methods for Business Decision Making
  - BUS 230 3
- Business Law II
  - BUS 186 3
- Internship
  - BUS 932 4
- Statistics
  - MAT 156 3
- Principles of Management
  - MGT 101 3

Students must complete 68 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in accounting.
# Accounting and Information Technology

**Award: Associate of Applied Science Degree**

This two-year applied program prepares students to work in the accounting profession by providing a foundation of principles of accounting and technology basics. The emphasis is on strong information technology skills in order to enhance the use of accounting information systems and enterprise resource planning systems. The accountants of tomorrow will find it necessary to extract data and present it in a way that can be used for decision making. Students will be asked to apply advanced problem-solving techniques and accounting principles in a business environment.

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td><strong>Course Name</strong></td>
<td><strong>Course #</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td></td>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Principles of Accounting</td>
<td>ACC 131</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Introduction to Keyboarding or proof of competency</td>
<td>ADM 105</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Introduction to Business</td>
<td>BUS 102</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Computers</td>
<td>CSC 110</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Composition I</td>
<td>ENG 105</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Principles of Macroeconomics or Principles of Microeconomics</td>
<td>ECN 120</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ECN 130</td>
<td>3</td>
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<tr>
<td><strong>Spring Semester</strong></td>
<td><strong>Course Name</strong></td>
<td><strong>Course #</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td></td>
<td>Comprehensive Spreadsheets</td>
<td>BCA 152</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Principles of Accounting II</td>
<td>ACC 132</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Fundamentals of Oral Communication</td>
<td>SPC 101</td>
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</tr>
<tr>
<td></td>
<td>PC Operating Systems</td>
<td>CIS 650</td>
<td>3</td>
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<tr>
<td></td>
<td>Business Math and Calculators</td>
<td>BUS 110</td>
<td>3</td>
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</table>

*General education elective options include, but are not limited to:

- Western Civilization: Ancient to Early Modern
- Western Civilization: Early Modern to Present
- Introduction to Literature
- Introduction to Psychology
- Introduction to Sociology

**Related elective options include, but are not limited to:

- Payroll Accounting
- Advanced Data Base and SQL
- Management Information Systems

Students must complete 69 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in accounting and information technology.

---

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Administrative Office Technology

Award: Associate of Applied Science Degree

Office careers have great growth potential in the state of Iowa. According to the Bureau of Labor Statistics, many secretarial and administrative duties are of a personal, interactive nature and therefore are not easily automated. Responsibilities such as planning conferences, working with clients and instructing staff require tact and communication skills. Hands-on experience with the latest office equipment will provide students with the knowledge and skills needed for the challenges of an exciting office career. Southwestern offers a diploma in office skills as well.

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Year 1</th>
<th>Fall Semester</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Name</td>
<td>Course #</td>
<td>Credits</td>
<td>Course Name</td>
</tr>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
<td>Business Law I</td>
</tr>
<tr>
<td>Elements of Writing</td>
<td>ENG 101</td>
<td>3</td>
<td>Digital Layout</td>
</tr>
<tr>
<td>Human Relations</td>
<td>BUS 161</td>
<td>3</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>Introduction to Computers</td>
<td>CSC 110</td>
<td>3</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>Keyboarding</td>
<td>ADM 112</td>
<td>3</td>
<td>Comprehensive Databases</td>
</tr>
<tr>
<td>Keyboarding II</td>
<td>ADM 116</td>
<td>3</td>
<td>Digital Communications</td>
</tr>
<tr>
<td>Office Procedures</td>
<td>ADM 162</td>
<td>3</td>
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<th>Spring Semester</th>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Name</td>
<td>Course #</td>
<td>Credits</td>
<td>Course Name</td>
</tr>
<tr>
<td>Business Communications (Business)</td>
<td>BUS 121</td>
<td>3</td>
<td>Layout Design I</td>
</tr>
<tr>
<td>Business Math and Calculators</td>
<td>BUS 110</td>
<td>3</td>
<td>Personal Finance</td>
</tr>
<tr>
<td>Pre-Employment Strategies</td>
<td>SDV 153</td>
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<td>Intermediate Algebra</td>
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<tr>
<td>Comprehensive Spreadsheets</td>
<td>BCA 152</td>
<td>3</td>
<td>Composition</td>
</tr>
<tr>
<td>Fundamentals of Oral Communication</td>
<td>SPC 101</td>
<td>3</td>
<td>Integrated Computer Business Applications</td>
</tr>
<tr>
<td>Introduction to Accounting</td>
<td>ACC 111</td>
<td>3</td>
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</table>

AAS Degree Total: **70.0**

Students must complete 70 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in administrative office technology.

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Agricultural Business

Award: Associate of Applied Science Degree

The Associate of Applied Science (AAS) degree in agricultural business is a career-oriented program that combines business courses with agricultural science courses. Continuing technological and other advances have increased the need for future workers to gain specialized training prior to beginning careers in agricultural business. This program includes the essential accounting, economics, science, marketing and agricultural courses needed for today’s complex and changing agricultural business world. Students learn to apply technical skills necessary for entry-level positions as farm and feedlot managers, sales and technical service representatives, grain merchandisers, commodity brokers, agriculture lending officers, seed and fertilizer salespersons, farmers, etc. A large number of jobs are available in the sector due to the unprecedented volume of workers entering retirement and increased global food demands. By pursuing an agricultural business degree students will obtain the business, technological and interpersonal skills necessary for a successful career in these exciting fields.

### Year 1

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
</tr>
<tr>
<td>Principles of Agronomy</td>
<td>AGA 114</td>
<td>3</td>
</tr>
<tr>
<td>Survey of the Animal Industry</td>
<td>AGS 112</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Computers</td>
<td>CSC 110</td>
<td>3</td>
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<tr>
<td>Employment Communications</td>
<td>COM 724</td>
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<tr>
<td>Agriculture Lab I</td>
<td>AGC 908</td>
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#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Beef Cattle Science</td>
<td>AGS 226</td>
<td>3</td>
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<tr>
<td>Agriculture Elective**</td>
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<tr>
<td>Composition I</td>
<td>ENG 105</td>
<td>3</td>
</tr>
<tr>
<td>Technical Math</td>
<td>MAT 743</td>
<td>3</td>
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#### Summer Session

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<tr>
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**General education elective options include, but are not limited to:**

- Western Civilization: Ancient to Early Modern
  - HIS 110 3
- Western Civilization: Early Modern to Present
  - HIS 111 3
- Introduction to Literature
  - LIT 101 3
- Introduction to Psychology
  - PSY 111 3
- Introduction to Sociology
  - SOC 110 3

**Business/computer science elective options include, but are not limited to:**

- Introduction to Entrepreneurship
  - BUS 130 3
- Digital Layout
  - GRA 131 3
- Principles of Management
  - MGT 101 3
- Principles of Marketing
  - MKT 110 3

**Agriculture elective options include, but are not limited to:**

- Fundamentals of Soil Science
  - AGA 154 3
- Introduction to Sprayer and Fertilizer Application
  - AGA 286 1
- Integrated Pest Management
  - AGA 376 3
- Introduction to Horticulture
  - AGH 106 3
- Farm Equipment Management
  - AGM 154 1
- Introduction to Precision Farming
  - AGR 334 1
- Animal Health
  - AGS 242 3
- Livestock Evaluation
  - AGS 305 3
- Animal Reproduction
  - AGS 331 3
- Animal Breeding and Genetics
  - AGS 355 3
- Online agriculture course
  - 3

Students must complete 68 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in agricultural business.
Auto Collision Repair/Refinish

Awards: Diploma or Associate of Applied Science Degree

This ASE NATEF-certified program balances the I-CAR® Enhanced Delivery curriculum with actual hands-on experience in our lab/shop. Automotive Service Excellence (ASE) certified staff will train students in areas of panel straightening, refinishing, structural and non-structural repair, plastic repair, welding, mechanical repairs, and estimating. The latest technology and quality workmanship are incorporated into the curriculum. Students can earn I-CAR® Gold Class points and I-CAR® Platinum Individual recognition through our I-CAR® Industry Training Alliance Membership. The training also allows students to become ASE certified. This is an I-CAR Gold Class Professional program.

### Year 1

#### Diploma

<table>
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<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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<tbody>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
</tr>
<tr>
<td>Technical Math</td>
<td>MAT 743</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Collision Repair</td>
<td>CRR 301</td>
<td>1</td>
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<tr>
<td>Sheet Metal Welding</td>
<td>CRR 101</td>
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<td>Sheet Metal Fundamentals</td>
<td>CRR 324</td>
<td>4</td>
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<tr>
<td>Non-Structural Repair</td>
<td>CRR 420</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Refinishing</td>
<td>CRR 804</td>
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</table>

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Employment Communications</td>
<td>COM 724</td>
<td>3</td>
</tr>
<tr>
<td>Estimating</td>
<td>CRR 743</td>
<td>3</td>
</tr>
<tr>
<td>Plastic Repair</td>
<td>CRR 201</td>
<td>2</td>
</tr>
<tr>
<td>Frame and Unibody Damage Analysis</td>
<td>CRR 504</td>
<td>4</td>
</tr>
<tr>
<td>Refinishing II</td>
<td>CRR 833</td>
<td>3</td>
</tr>
<tr>
<td>Collision Lab I</td>
<td>CRR 361</td>
<td>4</td>
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#### Summer Session

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
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<tbody>
<tr>
<td>Refinishing III</td>
<td>CRR 835</td>
<td>2</td>
</tr>
<tr>
<td>Structural Parts Replacement</td>
<td>CRR 508</td>
<td>3</td>
</tr>
<tr>
<td>Collision Lab II</td>
<td>CRR 362</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective*</td>
<td></td>
<td>3</td>
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**Diploma Total:** 48.0

<table>
<thead>
<tr>
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<th>Course #</th>
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</thead>
<tbody>
<tr>
<td>Refinishing III</td>
<td>CRR 835</td>
<td>2</td>
</tr>
<tr>
<td>Structural Parts Replacement</td>
<td>CRR 508</td>
<td>3</td>
</tr>
<tr>
<td>Collision Lab II</td>
<td>CRR 362</td>
<td>2</td>
</tr>
<tr>
<td>General Education Elective*</td>
<td></td>
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### Year 2

#### Associate of Applied Science Degree

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Personal Finance</td>
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</tr>
<tr>
<td>Advanced Structural Repair</td>
<td>CRR 572</td>
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<tr>
<td>Advanced Estimating</td>
<td>CRR 760</td>
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<tr>
<td>Collision Lab III</td>
<td>CRR 363</td>
<td>2</td>
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<tr>
<td>Introduction to Automotive Technology</td>
<td>AUT 104</td>
<td>3</td>
</tr>
<tr>
<td>Automotive Brake Systems</td>
<td>AUT 503</td>
<td>3</td>
</tr>
<tr>
<td>Automotive Suspension and Steering</td>
<td>AUT 404</td>
<td>4</td>
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#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Science (with lab)</td>
<td>PHS 125</td>
<td>4</td>
</tr>
<tr>
<td>Collision Lab IV</td>
<td>CRR 364</td>
<td>2</td>
</tr>
<tr>
<td>Basic Automotive Electricity</td>
<td>AUT 603</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Automotive Electricity</td>
<td>AUT 652</td>
<td>3</td>
</tr>
<tr>
<td>Automotive Heating and Air Conditioning</td>
<td>AUT 704</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Welding Techniques</td>
<td>CRR 116</td>
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<tr>
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**AAS Degree Total (including diploma):** 85.0

Students working through both the auto collision repair/refinish and automotive repair technology programs may need some elective courses to achieve full-time financial aid status during the third year. Suggested electives include BUS 102 Introduction to Business, BUS 130 Introduction to Entrepreneurship, BUS 110 Business Math and Calculators, and CSC 107 Computer Literacy.

Students must complete 85 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in auto collision repair/refinish.

Students must complete 48 credits and maintain a 2.0 grade point average to be awarded a diploma in auto collision repair/refinish.

---

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Automotive Repair/Automotive Repair Technology

Awards: Diploma, Associate of Applied Science Degree, or Certificate

In this program, students will learn theory, diagnostics and repair procedures in basic automotive areas such as air conditioning, electricity, brakes, and steering and suspension systems. Maintenance and light repairs are the fastest growing segment in automotive repair technology. Salaries and benefits reflect this need as independent repair shops, dealerships and franchised shops are employing technicians specializing in one-day repairs.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
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</tr>
<tr>
<td>✓ Course Name</td>
<td>Course #</td>
</tr>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
</tr>
<tr>
<td>Introduction to Automotive Technology</td>
<td>AUT 104</td>
</tr>
<tr>
<td>Automotive Brake Systems</td>
<td>AUT 503</td>
</tr>
<tr>
<td>Automotive Suspension and Steering</td>
<td>AUT 404</td>
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<tr>
<td>Technical Math</td>
<td>MAT 743</td>
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<tr>
<td>Welding for Automotive Mechanics</td>
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<tr>
<td><strong>Spring Semester</strong></td>
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<tr>
<td>✓ Course Name</td>
<td>Course #</td>
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<tr>
<td>Basic Automotive Electricity</td>
<td>AUT 603</td>
</tr>
<tr>
<td>Advanced Automotive Electricity</td>
<td>AUT 652</td>
</tr>
<tr>
<td>Automotive Heating and Air Conditioning</td>
<td>AUT 704</td>
</tr>
<tr>
<td>Employment Communications</td>
<td>COM 724</td>
</tr>
<tr>
<td>Advanced Welding Techniques</td>
<td>CRR 116</td>
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<td>Total:</td>
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<tr>
<td><strong>Summer Session</strong></td>
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<tr>
<td>✓ Course Name</td>
<td>Course #</td>
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<tr>
<td>Basic Automotive Powertrain</td>
<td>AUT 242</td>
</tr>
<tr>
<td>Automotive Service Management</td>
<td>AUT 870</td>
</tr>
<tr>
<td>Hybrid Fundamentals</td>
<td>AUT 190</td>
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<tr>
<td>Diploma Total:</td>
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</table>

Students must complete 41 credits and maintain a 2.0 grade point average to be awarded a diploma in automotive repair.

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Associate of Applied Science Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>✓ Course Name</td>
<td>Course #</td>
</tr>
<tr>
<td>Automotive Fuel Systems</td>
<td>AUT 834</td>
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<tr>
<td>Automotive Engine Repair</td>
<td>AUT 163</td>
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<tr>
<td>Advanced Automotive Engine Repair</td>
<td>AUT 173</td>
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<tr>
<td>Personal Finance</td>
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<td>General Education Elective*</td>
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<td>Total:</td>
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<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
</tr>
<tr>
<td>✓ Course Name</td>
<td>Course #</td>
</tr>
<tr>
<td>Automotive Electronic Engine Controls</td>
<td>AUT 844</td>
</tr>
<tr>
<td>Advanced Automotive Brakes and Alignment</td>
<td>AUT 535</td>
</tr>
<tr>
<td>Physical Science (with lab)</td>
<td>PHS 125</td>
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<tr>
<td>Total:</td>
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<td><strong>Summer Session</strong></td>
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<tr>
<td>✓ Course Name</td>
<td>Course #</td>
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<tr>
<td>Advanced Automotive Powertrain</td>
<td>AUT 243</td>
</tr>
<tr>
<td>Advanced Automotive Tune-up</td>
<td>AUT 823</td>
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<tr>
<td>AAS Degree Total (including diploma):</td>
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</table>

*General education elective options include, but are not limited to:

- Composition I ENG 105 3
- Western Civilization: Ancient to Early Modern HIS 110 3
- Introduction to Psychology PSY 111 3
- Fundamentals of Oral Communication SPC 101 3

Students must complete 82 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in automotive repair technology.

Students working through both the auto collision repair/refinish and automotive repair technology programs may need some elective courses to achieve full-time financial aid status during the third year. Suggested electives include BUS 102 Introduction to Business, BUS 130 Introduction to Entrepreneurship, BUS 110 Business Math and Calculators, and CSC 107 Computer Literacy.

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
## Automotive Repair/Automotive Repair Technology (continued)

Awards: Diploma, Associate of Applied Science Degree, or Certificate

### Certificate

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>Introduction to Automotive Technology</td>
<td>AUT 104</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Automotive Brake Systems</td>
<td>AUT 503</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Automotive Suspension and Steering</td>
<td>AUT 404</td>
<td>4</td>
</tr>
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<td></td>
<td><strong>Total:</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Automotive Electricity</td>
<td>AUT 603</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Advanced Automotive Electricity</td>
<td>AUT 652</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Automotive Heating and Air Conditioning</td>
<td>AUT 704</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total:</strong></td>
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</tbody>
</table>

**Certificate Total:** 20.0

Students must complete 20 credits and maintain a 2.0 grade point average to be awarded a certificate in automotive repair.
# Business Administration

**Award: Associate of Applied Science Degree**

The business administration curriculum consists of specific course work in business, accounting, economics, management, and law. Graduates of this program will be able to display a knowledge of business concepts required for today's ever-changing business environment with a background in critical thinking skills and team building. The job opportunities are varied and may include finance, management, marketing, sales, or small business ownership.

## Year 1

### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
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<tr>
<td>Principles of Accounting I</td>
<td>ACC 131</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>BUS 102</td>
<td>3</td>
</tr>
<tr>
<td>Composition I</td>
<td>ENG 105</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Computers</td>
<td>CSC 110</td>
<td>3</td>
</tr>
<tr>
<td>Intermediate Algebra or higher level mathematics</td>
<td>MAT 101</td>
<td>3</td>
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Total: **17.0**

### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
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<tbody>
<tr>
<td>Principles of Accounting II</td>
<td>ACC 132</td>
<td>4</td>
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<tr>
<td>Composition II or Business Communications (Business)</td>
<td>ENG 106</td>
<td>3</td>
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<tr>
<td>Comprehensive Spreadsheets</td>
<td>BCA 152</td>
<td>3</td>
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<td>General Education Elective*</td>
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<tr>
<td>Business/Computer Elective**</td>
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Total: **16.0**

**General education elective options include, but are not limited to:**
- Western Civilization: Ancient to Early Modern
  - HIS 110 3
- Western Civilization: Early Modern to Present
  - HIS 111 3
- Introduction to Literature
  - LIT 101 3
- Introduction to Psychology
  - PSY 111 3
- Introduction to Sociology
  - SOC 110 3

### Year 2

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Business Law I</td>
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<td>3</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>MGT 101</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Macroeconomics</td>
<td>ECN 120</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Oral Communication</td>
<td>SPC 101</td>
<td>3</td>
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<tr>
<td>Business/Computer Elective**</td>
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<tr>
<td>General Education Elective*</td>
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Total: **18.0**

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Pre-Employment Strategies</td>
<td>SDV 153</td>
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<tr>
<td>Business Law II</td>
<td>BUS 186</td>
<td>3</td>
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<tr>
<td>Principles of Marketing</td>
<td>MKT 110</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Microeconomics</td>
<td>ECN 130</td>
<td>3</td>
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<tr>
<td>Business Problem Solving</td>
<td>BUS 238</td>
<td>3</td>
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<tr>
<td>Statistics or Quantitative Methods for Business Decision Making</td>
<td>MAT 156</td>
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Total: **17.0**

**AAS Degree Total:** **68.0**

**Business/computer elective options available for emphasis tracks:**
- Accounting (A), Management (M), Entrepreneurship (E), Sports Management (SM), and Leadership (L):
  - Cost Accounting (A & M)  ACC 221  3
  - Income Tax Accounting (A) ACC 261  3
  - Computer Accounting (A)  ACC 311  3
  - Introduction to Entrepreneurship (E) BUS 130  3
  - E-commerce (E) BUS 150  3
  - Human Relations (M) BUS 161  3
  - Introduction to Leadership (L) BUS 165  3
  - Applied Leadership (L) BUS 166  3
  - Small Business Management (M & E) MGT 110  3
  - Sports and Society (SM) PEC 108  3
  - Introduction to Physical Education (SM) PEH 162  3
  - Principles of Sports Management (SM) PEH 255  3

Students must complete 68 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in business administration.

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Business Administration (continued)

Award: Business Leadership Certificate

The leadership certificate program is designed for working professionals who are preparing themselves for leadership positions in government, business or not-for-profit organizations. It balances practical leadership skills with a strong business foundation. The program will introduce students to fundamental leadership theories, concepts and practices and will enhance leadership practice in order to increase effectiveness.

<table>
<thead>
<tr>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
</tr>
<tr>
<td>✓ Course Name</td>
</tr>
<tr>
<td>Introduction to Leadership</td>
</tr>
<tr>
<td>Introduction to Business</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
</tr>
<tr>
<td><strong>Spring Semester</strong></td>
</tr>
<tr>
<td>✓ Course Name</td>
</tr>
<tr>
<td>Applied Leadership</td>
</tr>
<tr>
<td>Principles of Management</td>
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<tr>
<td><strong>Total:</strong></td>
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</table>

**Certificate Total:** 12.0

Students must complete 12 credits and maintain a 2.0 grade point average to be awarded a certificate in business leadership.
# Carpentry and Building Trades

**Awards:** Diploma, Associate of Applied Science Degree, or Certificate

The carpentry and building trades program will prepare students for entry into all carpentry fields from residential home construction to commercial building. This program offers students opportunities to complete all four levels of apprenticeship training as recommended by the Bureau of Apprenticeship Training and recognized by the Associated Builders and Contractors, Incorporated.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Diploma</th>
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<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>✓ Course Name</td>
<td>Course #</td>
</tr>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
</tr>
<tr>
<td>Basic Construction Skills</td>
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<tr>
<td>Carpentry Level I</td>
<td>CON 155</td>
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<td>Construction Lab IA</td>
<td>CON 183</td>
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<tr>
<td>Construction Lab IB</td>
<td>CON 184</td>
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<td>Technical Math</td>
<td>MAT 743</td>
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<tr>
<td><strong>Spring Semester</strong></td>
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</tr>
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<td>Course #</td>
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<tr>
<td>Carpentry Level IIA</td>
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<td>Carpentry Level IIB</td>
<td>CON 267</td>
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<tr>
<td>Construction Lab IIA</td>
<td>CON 188</td>
</tr>
<tr>
<td>Construction Lab IIB</td>
<td>CON 189</td>
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<tr>
<td>Employment Communications</td>
<td>COM 724</td>
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<tr>
<td><strong>Summer Session</strong></td>
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<td>✓ Course Name</td>
<td>Course #</td>
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<tr>
<td>Commercial Print Reading</td>
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<table>
<thead>
<tr>
<th>Year 2</th>
<th>Associate of Applied Science Degree</th>
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</thead>
<tbody>
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<td><strong>Fall Semester</strong></td>
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<tr>
<td>✓ Course Name</td>
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<td>Carpentry Level III</td>
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<td>Construction Lab III</td>
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<tr>
<td><strong>Spring Semester</strong></td>
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</tr>
<tr>
<td>✓ Course Name</td>
<td>Course #</td>
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<tr>
<td>Carpentry Level IV</td>
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<td>Construction Lab IV</td>
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<tr>
<td>General Education Elective*</td>
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<tr>
<td><strong>Summer Session</strong></td>
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<td>Internship</td>
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<td><strong>4.0</strong></td>
</tr>
<tr>
<td><strong>AAS Degree Total (including diploma):</strong></td>
<td><strong>83.0</strong></td>
</tr>
</tbody>
</table>

Students must complete 83 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in carpentry and building trades.

*General education elective options include, but are not limited to:

- Elements of Writing | ENG 101 | 3
- Composition I | ENG 105 | 3
- Western Civilization: Ancient to Early Modern | HIS 110 | 3
- Western Civilization: Early Modern to Present | HIS 111 | 3
- Introduction to Psychology | PSY 111 | 3

Students must complete 43 credits and maintain a 2.0 grade point average to be awarded a diploma in carpentry and building trades.
Carpentry and Building Trades (continued)

Awards: Diploma, Associate of Applied Science Degree, or Certificate

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Construction Skills</td>
<td>CON 141</td>
<td>2</td>
</tr>
<tr>
<td>Construction Lab IA</td>
<td>CON 183</td>
<td>5</td>
</tr>
<tr>
<td>Carpentry Level I</td>
<td>CON 155</td>
<td>3</td>
</tr>
<tr>
<td>Construction Lab IB</td>
<td>CON 184</td>
<td>5</td>
</tr>
</tbody>
</table>

Certificate Total: 15.0

Students must complete 15 credits and maintain a 2.0 grade point average to be awarded a certificate in carpentry and building trades.

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
# Crop Production

**Awards: Associate of Applied Science Degree**

The crop production program provides a blend of crop-related courses and practical application, ensuring a well-rounded agricultural education. During the program, students obtain knowledge of current practices in crop production and technology within the production field, gaining confidence in producing locally grown crops. Students take courses in topics such as agronomy, grain and forages, precision farming, soils, and equipment management. Hands-on experiences, including involvement with the management and operation of a 235 acre farm and a cow-calf operation, take learning outside the classroom and allow students to practice what they are taught. Upon graduation, students are prepared for successful careers, whether they choose to pursue positions in the workplace or on the farm.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester</td>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Principles of Agronomy</td>
<td>AGA 114</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Survey of the Animal Industry</td>
<td>AGS 112</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Social Sciences/Humanities Elective**</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Employment Communications</td>
<td>COM 724</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Agriculture Lab I</td>
<td>AGC 908</td>
<td>1</td>
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<table>
<thead>
<tr>
<th>Year 2</th>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester</td>
<td>Farm Records Accounts and Analysis</td>
<td>AGB 326</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Agriculture Markets</td>
<td>AGB 235</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Sustainability</td>
<td>ENV 102</td>
<td>3</td>
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<tr>
<td></td>
<td>Agriculture Lab II</td>
<td>AGC 909</td>
<td>1</td>
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<tr>
<td></td>
<td>Agriculture Elective*</td>
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<tr>
<td></td>
<td>General Education Elective***</td>
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<table>
<thead>
<tr>
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<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internship</td>
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**Fall Semester**

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<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Introduction to Horticulture</td>
<td>AGH 106</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Soil Science</td>
<td>AGA 154</td>
<td>3</td>
</tr>
<tr>
<td>Grain and Forage Crops</td>
<td>AGA 212</td>
<td>4</td>
</tr>
<tr>
<td>Farm Equipment Management</td>
<td>AGM 154</td>
<td>1</td>
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<tr>
<td>Agriculture Lab I</td>
<td>AGC 908</td>
<td>1</td>
</tr>
<tr>
<td>Agriculture Elective*</td>
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<td>3</td>
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<tr>
<td>Technical Math</td>
<td>MAT 743</td>
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**Year 2**

<table>
<thead>
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<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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<tr>
<td>Internship</td>
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</table>

*Agriculture elective options include, but are not limited to:

- Issues in Sustainable Agriculture AGA 450 3
- Agricultural Selling AGB 336 3
- Swine Science AGS 225 3
- Beef Cattle Science AGS 226 3
- Animal Health AGS 242 3
- Livestock Merchandising AGS 280 3
- Livestock Evaluation AGS 305 3
- Animal Nutrition AGS 319 3
- Animal Reproduction AGS 331 3
- Feeds and Feeding Lab AGS 345 1
- Animal Breeding and Genetics AGS 355 3

**Spring Semester**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Business Management</td>
<td>AGB 330</td>
<td>3</td>
</tr>
<tr>
<td>Integrated Pest Management</td>
<td>AGA 376</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Sprayer and Fertilizer Application</td>
<td>AGA 286</td>
<td>1</td>
</tr>
<tr>
<td>Introduction to Precision Farming</td>
<td>AGP 334</td>
<td>1</td>
</tr>
<tr>
<td>Agriculture Lab II</td>
<td>AGC 909</td>
<td>1</td>
</tr>
<tr>
<td>Agriculture Elective*</td>
<td></td>
<td>3</td>
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<tr>
<td>Agriculture Elective*</td>
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<td>Total:</td>
<td></td>
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</table>

**AAS Degree Total:** 68.0

**Social sciences/humanities elective options include, but are not limited to:**

- Western Civilization: Early Modern to Present HIS 111 3
- Introduction to Literature LIT 101 3
- Introduction to Psychology PSY 111 3
- Introduction to Sociology SOC 110 3

**General education elective options include, but are not limited to:**

- Western Civilization: Ancient to Early Modern HIS 110 3
- Fundamentals of Oral Communication SPC 101 3

Students must complete 68 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in crop production.

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.

70
Electricity Technology

**Award: Diploma, Associate of Applied Science Degree, or Certificate**

The electrical technology program provides students with the training essential for entry-level positions such as residential or commercial electrician or industrial maintenance electrician. Students will become familiar with the electrical operations of alternative energy systems. This program may be used as a springboard into apprenticeship training.

### Year 1

**Diploma**

#### Fall Semester
- The College Experience: SDV 108 (1 credit)
- National Electrical Code® I: ELE 155 (2 credits)
- Introduction to Wiring: ELE 178 (5 credits)
- Residential Electrical Services: ELE 207 (3 credits)
- Technical Math: MAT 743 (3 credits)

**Total:** 14.0 credits

#### Spring Semester
- DC Theory: ELE 177 (3 credits)
- Motor Control: ELE 195 (3 credits)
- Advanced Wiring Systems: ELE 179 (5 credits)
- Employment Communications: COM 724 (3 credits)
- Blueprint Reading (1 credit) and Blueprint Reading II (1 credit) or AutoCAD I (3 credits): ELE 116 (2 credits)

**Total:** 16.0 credits

#### Summer Session
- National Electrical Code® II: ELE 156 (2 credits)
- Electric Lighting Systems: ELE 180 (2 credits)
- Internship: ELE 932 (4 credits)

**Total:** 8.0 credits

**Diploma Total:** 38.0 credits

Students must complete 38 credits and maintain a 2.0 grade point average to be awarded a diploma in electrical technology.

### Year 2

**Associate of Applied Science Degree**

#### Fall Semester
- Calculations of Electrical Systems: ELE 230 (3 credits)
- Introduction to Computers: CSC 110 (3 credits)
- Commercial Electrical Equipment and Services: ELE 213 (5 credits)
- Social Sciences/Humanities Elective*: 3 credits
- General Education Elective**: 3 credits

**Total:** 17.0 credits

#### Spring Semester
- Commercial Electrical Systems: ELE 214 (5 credits)
- Advanced Controls: ELE 208 (5 credits)
- AC Fundamentals: ELE 201 (3 credits)
- Introduction to Renewable Energy: ENV 154 (3 credits)

**Total:** 16.0 credits

#### Summer Session
- Industrial Electrical Systems: ELE 212 (3 credits)
- Alternative Energy Systems: ELE 223 (2 credits)

**Total:** 5.0 credits

**AAS Degree Total (including diploma):** 76.0 credits

*Social sciences/humanities elective options include, but are not limited to:
- Personal Finance: ECN 115 (3 credits)
- Introduction to Psychology: PSY 111 (3 credits)
- Introduction to Sociology: SOC 110 (3 credits)

**General education elective options include, but are not limited to:
- Western Civilization: Ancient to Early Modern: HIS 110 (3 credits)
- Western Civilization: Early Modern to Present: HIS 111 (3 credits)
- Introduction to Literature: LIT 101 (3 credits)

Students must complete 76 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in electrical technology.
## Electrical Technology (continued)

**Award:** Diploma, Associate of Applied Science Degree, or Certificate

<table>
<thead>
<tr>
<th>Certificate</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>✓ Course Name</td>
<td>Course #</td>
</tr>
<tr>
<td>Introduction to Wiring</td>
<td>ELE 178</td>
</tr>
<tr>
<td>Technical Math</td>
<td>MAT 743</td>
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<tr>
<td><strong>Total:</strong></td>
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<tr>
<td><strong>Spring Semester</strong></td>
<td></td>
</tr>
<tr>
<td>✓ Course Name</td>
<td>Course #</td>
</tr>
<tr>
<td>Advanced Wiring Systems</td>
<td>ELE 179</td>
</tr>
<tr>
<td>Blueprint Reading</td>
<td>ELE 116</td>
</tr>
<tr>
<td>Blueprint Reading II</td>
<td>ELE 174</td>
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<tr>
<td><strong>Certificate Total:</strong></td>
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</tr>
</tbody>
</table>

Students must complete 15 credits and maintain a 2.0 grade point average to be awarded a certificate in electrical technology.
Graphic Design
Award: Associate of Applied Science Degree

The impact of graphic designers can be seen everywhere—in logos, brochures, newsletters, posters, Web sites, packaging, and much more. Southwestern’s graphic design program will help you learn how to effectively and professionally arrange various elements to convey information to an audience. In just two years, you will gain skills using the latest graphic design software to put your designs in print and on the Web.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong>&lt;br&gt; ✓ Course Name</td>
<td>Course Name</td>
</tr>
<tr>
<td>The College Experience</td>
<td>Digital Communications</td>
</tr>
<tr>
<td>Introduction to Computers</td>
<td>Typography</td>
</tr>
<tr>
<td>Digital Layout</td>
<td>Computer Graphic Design</td>
</tr>
<tr>
<td>Drawing</td>
<td>Digital Photography</td>
</tr>
<tr>
<td>2-D Design</td>
<td>Intermediate Algebra</td>
</tr>
<tr>
<td>Composition I</td>
<td>Personal Finance</td>
</tr>
<tr>
<td><strong>Total:</strong> 16.0</td>
<td><strong>Total:</strong> 18.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Course Name</td>
<td>Course Name</td>
</tr>
<tr>
<td>Business Communications (Business)</td>
<td>Business Communications (Business)</td>
</tr>
<tr>
<td>Principles of Marketing or E-commerce</td>
<td>Digital Design</td>
</tr>
<tr>
<td>Layout Design I</td>
<td>Introduction to Printing Technologies</td>
</tr>
<tr>
<td>Introduction to Computer Animation</td>
<td>Fundamentals of Oral Communication</td>
</tr>
<tr>
<td>3-D Design</td>
<td>Pre-Employment Strategies</td>
</tr>
<tr>
<td>Introduction to Entrepreneurship</td>
<td>Social Sciences/Humanities Elective*</td>
</tr>
<tr>
<td><strong>Total:</strong> 18.0</td>
<td><strong>Total:</strong> 17.0</td>
</tr>
</tbody>
</table>

*AAS Degree Total: 69.0

*Social sciences/humanities elective options include, but are not limited to:
- Art Appreciation
- Introduction to Psychology
- Introduction to Sociology

Students must complete 69 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in graphic design.
**Industrial Technology**

**Award:** Diploma, Associate of Applied Science Degree, or Certificate

Behind the scenes at any manufacturing operation is a team of technicians who keep the operation running smoothly. Students learn skills in maintaining and troubleshooting electrical and mechanical systems and machinery. The diverse education includes training in welding, electrical, hydraulics, pneumatics, blueprint reading, etc.

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Course Name</td>
<td>Course #</td>
</tr>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
</tr>
<tr>
<td>National Electrical Code I</td>
<td>ELE 155</td>
</tr>
<tr>
<td>General Industry Safety</td>
<td>IND 114</td>
</tr>
<tr>
<td>Basic Electrical Fundamentals</td>
<td>ELE 110</td>
</tr>
<tr>
<td>Fundamentals of Fluid Dynamics</td>
<td>ELE 172</td>
</tr>
<tr>
<td>Bearings and Lubrication</td>
<td>IND 159</td>
</tr>
<tr>
<td>Technical Math</td>
<td>MAT 743</td>
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<td><strong>Total:</strong></td>
<td><strong>15.0</strong></td>
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</tbody>
</table>

| Spring Semester |
| Course Name | Course # | Credits |
| Advanced Fluid Power | ELT 793 | 3 |
| Motor Control | ELE 195 | 3 |
| Introduction to PLCs | ELT 170 | 3 |
| Computer Literacy | CSC 107 | 3 |
| Maintenance Welding | WEL 124 | 3 |
| Personal Finance | ECN 115 | 3 |
| **Total:** | **18.0** |

| Summer Session |
| Course Name | Course # | Credits |
| Print Reading | IND 134 | 2 |
| Mechanical Drives | IND 195 | 3 |
| Industrial Heating and Cooling | IND 180 | 2 |
| **Total:** | **7.0** |

**Diploma Total:** **40.0**

**Year 2**

**Associate of Applied Science**

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Associate of Applied Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Course Name</td>
<td>Course #</td>
</tr>
<tr>
<td>Machine Shop Tools I</td>
<td>MFG 102</td>
</tr>
<tr>
<td>Advanced Programmable Logic</td>
<td>ELT 160</td>
</tr>
<tr>
<td>Industrial Pumps</td>
<td>IND 192</td>
</tr>
<tr>
<td>Principles of Motors/Transformers</td>
<td>ELT 192</td>
</tr>
<tr>
<td>Introduction to Fabrication</td>
<td>WEL 114</td>
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<tr>
<td>General Education Elective*</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>16.0</strong></td>
</tr>
</tbody>
</table>

| Spring Semester |
| Course Name | Course # | Credits |
| Advanced Motor Control | ELE 197 | 3 |
| Instrumentation & Control | ELT 736 | 2 |
| Automated Processes and Robotics | ELT 717 | 5 |
| Predictive and Preventative Maintenance | IND 185 | 2 |
| Employment Communications | COM 724 | 3 |
| General Education Elective* | | 3 |
| **Total:** | **18.0** |

| AAS Degree Total (including diploma): | **74.0** |

*General education elective options include, but are not limited to:
Western Civilization: Ancient to Early Modern | HIS 110 | 3 |
Western Civilization: Early Modern to Present | HIS 111 | 3 |
Introduction to Literature | LIT 101 | 3 |
Introduction to Psychology | PSY 111 | 3 |
Introduction to Sociology | SOC 110 | 3 |

**Students must complete 74 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in industrial technology.**

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Industrial Technology (continued)
Award: Diploma, Associate of Applied Science Degree, or Certificate

<table>
<thead>
<tr>
<th>Certificate</th>
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<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
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<tr>
<td>✓ Course Name</td>
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<tr>
<td>National Electrical Code I</td>
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<tr>
<td>General Industry Safety</td>
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<tr>
<td>Fundamentals of Fluid Dynamics</td>
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<tr>
<td>Bearings and Lubrication</td>
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<tr>
<td><strong>Certificate Total:</strong></td>
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</tbody>
</table>

Students must complete 11 credits and maintain a 2.0 grade point average to be awarded a certificate in industrial technology.
Information Technology Systems Networking

Awards: Diploma, Associate of Applied Science Degree, or Certificate

The information technology systems networking program is designed to provide the graduate with the skills necessary to install, configure, manage and maintain a network operating system. These are the skills necessary to pass the CompTia A+ Helpdesk Exams and Microsoft Certified IT Professional Certification Exams. Graduates will be prepared to work for any organization that currently has, or is planning to install, a network configuration for their computer system. Graduates will learn about regulatory compliance and entry level forensics for maintaining a secure network environment. Computer support organizations that consult with clients on the installation and maintenance of computer networks will find these graduates in high demand.

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
<td><strong>Diploma</strong></td>
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</tr>
<tr>
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<td></td>
<td><strong>Fall Semester</strong></td>
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<tr>
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<td>Course #</td>
<td>Credits</td>
</tr>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
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</tr>
<tr>
<td>Introduction to Computers</td>
<td>CSC 110</td>
<td>3</td>
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<tr>
<td>Intermediate Algebra or higher level mathematics</td>
<td>MAT 101</td>
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<tr>
<td>Computer Hardware Basics</td>
<td>NET 122</td>
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<tr>
<td>Operating Systems Software Basics</td>
<td>NET 132</td>
<td>3</td>
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<tr>
<td>Introduction to Robotics Networking</td>
<td>NET 852</td>
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<td>Fundamentals of Oral Communication</td>
<td>SPC 101</td>
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<td><strong>Spring Semester</strong></td>
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<tr>
<td>✓ Course Name</td>
<td>Course #</td>
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<tr>
<td>PC Operating Systems</td>
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<td>CISCO Networking</td>
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<tr>
<td>Introduction to Programming Logic</td>
<td>CIS 121</td>
<td>3</td>
</tr>
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<td>Implementing Windows Network Infrastructure</td>
<td>NET 333</td>
<td>3</td>
</tr>
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<td>Comprehensive Spreadsheets</td>
<td>BCA 152</td>
<td>3</td>
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<td>Web Design</td>
<td>GRA 151</td>
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<td><strong>Total:</strong></td>
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<td>✓ Course Name</td>
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<td><strong>Summer Session</strong></td>
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<td>Course #</td>
<td>Credits</td>
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<tr>
<td>Fundamentals of Network Security</td>
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</tbody>
</table>

Students must complete 44 credits and maintain a 2.0 grade point average to be awarded a diploma in information technology systems networking.

Students must complete 78 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in information technology systems networking.

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Information Technology Systems Networking *(continued)*

Awards: Diploma, Associate of Applied Science Degree, or Certificate

---

### Certificate

<table>
<thead>
<tr>
<th>Fall Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Name</strong></td>
</tr>
<tr>
<td>Computer Hardware Basics</td>
</tr>
<tr>
<td>Operating Systems Software Basics</td>
</tr>
<tr>
<td>Introduction to Robotics Networking</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Course Name</strong></td>
</tr>
<tr>
<td>PC Operating Systems</td>
</tr>
<tr>
<td>CISCO Networking</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
</tr>
<tr>
<td><strong>Certificate Total:</strong></td>
</tr>
</tbody>
</table>

Students must complete 13 credits and maintain a 2.0 grade point average to be awarded a certificate in information technology systems networking.

---

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Livestock Production

Award: Associate of Applied Science Degree

The livestock production program provides a blend of animal science courses and practical application, ensuring a well-rounded agricultural education. During the program, students obtain knowledge of current practices in the livestock industry, gaining confidence in being able to raise, produce, or market livestock. Students take courses in topics such as production, reproduction, nutrition, health, breeding, and genetics. Hands-on experiences, including involvement with the management and operation of a 235 acre farm and a cow-calf operation, take learning outside the classroom and allow students to practice what they are taught. Upon graduation, students are prepared for successful careers, whether they choose to pursue positions in the workplace or on the farm.

### Year 1

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
</tr>
<tr>
<td>Principles of Agronomy</td>
<td>AGA 114</td>
<td>3</td>
</tr>
<tr>
<td>Survey of the Animal Industry</td>
<td>AGS 112</td>
<td>4</td>
</tr>
<tr>
<td>Employment Communications</td>
<td>COM 724</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture Lab I</td>
<td>AGC 908</td>
<td>1</td>
</tr>
<tr>
<td>General Education Elective**</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total: 15.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock Evaluation</td>
<td>AGS 305</td>
<td>3</td>
</tr>
<tr>
<td>Beef Cattle Science</td>
<td>AGS 226</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture Lab I</td>
<td>AGC 908</td>
<td>1</td>
</tr>
<tr>
<td>Fundamentals of Oral Communication**</td>
<td>SPC 101</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture Elective*</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Technical Math</td>
<td>MAT 743</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total: 16.0</strong></td>
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#### Summer Session

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internship</td>
<td>AGB 932</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total: 4.0</strong></td>
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<td></td>
</tr>
</tbody>
</table>

### Year 2

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Records Accounts and Analysis</td>
<td>AGB 326</td>
<td>3</td>
</tr>
<tr>
<td>Animal Nutrition</td>
<td>AGS 319</td>
<td>3</td>
</tr>
<tr>
<td>Feeds and Feeding Lab</td>
<td>AGS 345</td>
<td>1</td>
</tr>
<tr>
<td>Swine Science</td>
<td>AGS 225</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Agriculture Markets</td>
<td>AGB 235</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture Lab II</td>
<td>AGC 909</td>
<td>1</td>
</tr>
<tr>
<td>Agriculture Elective*</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total: 17.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain and Forage Crops</td>
<td>AGA 212</td>
<td>4</td>
</tr>
<tr>
<td>Animal Breeding and Genetics</td>
<td>AGS 355</td>
<td>3</td>
</tr>
<tr>
<td>Farm Business Management</td>
<td>AGB 330</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture Lab II</td>
<td>AGC 909</td>
<td>1</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>ECN 115</td>
<td>3</td>
</tr>
<tr>
<td>Agriculture Elective*</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total: 17.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AAS Degree Total: 69.0**

**General education elective options include, but are not limited to:**

- Western Civilization: Ancient to Early Modern
- Western Civilization: Early Modern to Present
- Introduction to Literature
- Introduction to Psychology
- Introduction to Sociology

Students must complete 69 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in livestock production.

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Management Information Systems
Award: Associate of Applied Science Degree

This two-year program provides students with a balanced background of both business and computer technology courses. This unique combination of courses will prepare students to effectively manage people, technology and change within the organization. Possible areas of employment include help desk or technical services positions, corporate trainer, office manager, or information technology manager. Software certifications may be obtained upon completion of the program.

### Year 1

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
<td>1</td>
</tr>
<tr>
<td>Introduction to Computers</td>
<td>CSC 110</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Management</td>
<td>MGT 101</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>BUS 102</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Accounting or Principles of Accounting I (4 credits)</td>
<td>ACC 111</td>
<td>3</td>
</tr>
<tr>
<td>Human Relations</td>
<td>BUS 161</td>
<td>3</td>
</tr>
<tr>
<td>Composition I</td>
<td>ENG 105</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 19.0

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Entrepreneurship</td>
<td>BUS 130</td>
<td>3</td>
</tr>
<tr>
<td>PC Operating Systems</td>
<td>CIS 650</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Programming Logic</td>
<td>CIS 121</td>
<td>3</td>
</tr>
<tr>
<td>Business Communications (Business)</td>
<td>BUS 121</td>
<td>3</td>
</tr>
<tr>
<td>Comprehensive Spreadsheets</td>
<td>BCA 152</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Oral Communication</td>
<td>SPC 101</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 18.0

### Year 2

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Databases</td>
<td>BCA 167</td>
<td>3</td>
</tr>
<tr>
<td>Digital Communications</td>
<td>CSC 135</td>
<td>3</td>
</tr>
<tr>
<td>Management Information Systems</td>
<td>CIS 755</td>
<td>3</td>
</tr>
<tr>
<td>Business Law I</td>
<td>BUS 185</td>
<td>3</td>
</tr>
<tr>
<td>Visual Basic</td>
<td>CIS 604</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective*</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 18.0

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Data Base and SQL</td>
<td>CIS 339</td>
<td>3</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>ECN 115</td>
<td>3</td>
</tr>
<tr>
<td>Pre-Employment Strategies</td>
<td>SDV 153</td>
<td>2</td>
</tr>
<tr>
<td>Business Problem Solving</td>
<td>BUS 238</td>
<td>3</td>
</tr>
<tr>
<td>Project Management</td>
<td>CIS 750</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics/Sciences Elective**</td>
<td></td>
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</tbody>
</table>

**Total:** 17.0

**AAS Degree Total:** 72.0

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Biology (w/lab)</td>
<td>BIO 105</td>
<td>4</td>
</tr>
<tr>
<td>College Algebra or higher level math</td>
<td>MAT 120</td>
<td>3</td>
</tr>
<tr>
<td>Physical Science (w/lab)</td>
<td>PHS 125</td>
<td>4</td>
</tr>
</tbody>
</table>

*General education elective options include, but are not limited to:

- Introduction to Philosophy: PHI 101 (3 credits)
- Introduction to Ethics: PHI 105 (3 credits)
- Introduction to Psychology: PSY 111 (3 credits)
- Introduction to Sociology: SOC 110 (3 credits)

**Mathematics/sciences elective options include, but are not limited to:

- Introductory Biology (w/lab): BIO 105 (4 credits)
- College Algebra or higher level math: MAT 120 (3 credits)
- Physical Science (w/lab): PHS 125 (4 credits)

Students must complete 72 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in management information systems.
Nursing Education–Licensed Practical Nursing and Registered Nursing

**Awards:** Diploma or Associate of Applied Science Degree

Southwestern offers the licensed practical nursing program (LPN) and the registered nursing program (RN). These programs are offered as a “ladder concept,” meaning students take the LPN program, and upon completion are eligible to apply for the RN program. Graduates are eligible to take the LPN or RN certification exam at the end of their respective program.

**Note:** High school or college classes in chemistry and biology are highly recommended.

### Year 1
**Diploma (LPN)**

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Nursing I</td>
<td>PNN 172</td>
<td>4</td>
</tr>
<tr>
<td>Fundamentals of Nursing II</td>
<td>PNN 173</td>
<td>4</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>PNN 231</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Psychology</td>
<td>PSY 111</td>
<td>3</td>
</tr>
<tr>
<td>Essentials of Anatomy and Physiology</td>
<td>BIO 162</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 17.0

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal - Child Health</td>
<td>PNN 434</td>
<td>4</td>
</tr>
<tr>
<td>Medical - Surgical Nursing I</td>
<td>PNN 531</td>
<td>7</td>
</tr>
<tr>
<td>Developmental Psychology</td>
<td>PSY 121</td>
<td>3</td>
</tr>
<tr>
<td>Nutrition</td>
<td>BIO 151</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 17.0

#### Summer Session

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical - Surgical Nursing II</td>
<td>PNN 532</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Sociology</td>
<td>SOC 110</td>
<td>3</td>
</tr>
<tr>
<td>Composition I</td>
<td>ENG 105</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 9.0

**LPN Diploma Total:** 43.0

### Year 2
**Associate of Applied Science (RN)**

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Surgical Nursing</td>
<td>ADN 561</td>
<td>7</td>
</tr>
<tr>
<td>Mental Health Nursing</td>
<td>ADN 476</td>
<td>6.5</td>
</tr>
<tr>
<td>Microbiology (w/lab)</td>
<td>BIO 186</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total:** 17.5

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Nursing</td>
<td>ADN 563</td>
<td>10.5</td>
</tr>
<tr>
<td>Advanced Maternal-Child Health I</td>
<td>ADN 433</td>
<td>4</td>
</tr>
<tr>
<td>Essentials of Anatomy and Physiology (w/lab)</td>
<td>BIO 163</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total:** 18.5

#### Summer Session

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trends and Issues</td>
<td>ADN 831</td>
<td>3</td>
</tr>
<tr>
<td>Employment Empowerment</td>
<td>ADN 850</td>
<td>1</td>
</tr>
<tr>
<td>Advanced Maternal-Child Health II</td>
<td>ADN 443</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total:** 7.0

**AAS RN Degree Total (including LPN Diploma):** 86.0

Students must have their LPN license and complete an additional 43 credits (for a total of 86 credits) with a grade of “C” or above in all classes to be awarded the Associate of Applied Science degree in registered nursing.

(Nursing program information is continued on the next page.)

**Note:** The following courses may not be taken online: BIO 163 Essentials of Anatomy and Physiology (w/lab), BIO 168 Human Anatomy and Physiology I w/lab, BIO 173 Human Anatomy and Physiology II w/lab, and BIO 186 Microbiology (w/lab).
Nursing Education—Licensed Practical Nursing and Registered Nursing (continued)

Awards: Diploma or Associate of Applied Science Degree

The nursing curriculum offers students learning experiences in courses emphasizing concepts of the nursing process, the health-illness continuum, ethics, communications, the sciences and the professional nursing practice role. Students spend three days per week in the classroom and two days per week at a health care facility. A variety of clinical sites provide excellent experiences with direct supervision by skilled clinical faculty.

To be accepted into SWCC’s nursing programs, applicants must meet the requirements below:

» Achieve an ACT composite score of 20 or higher, or earn the following minimum scores on the ACCUPLACER test:
  - Writing = 86
  - Reading = 80
  - Arithmetic = 90
» American Heart Association Basic Life Support CPR is required before entering clinicals.
» Submit the dental report form, physician’s physical examination form, and proof of current immunizations.
» Receive a background check/inquiry of criminal records, prior to clinical, at student’s own expense.
» Clinical site requirements will be enforced by the college. These requirements may include drug screening, review of a conviction or pending charges which are of a criminal nature, health issues, or unacceptable behavior. Students will not be granted admission or may be removed at any time.
» RN students must graduate from an LPN program approved by the Board of Nursing and submit a copy of a current Iowa practical nursing license. New graduates must have a current Iowa license prior to October 15.
» RN students must also provide proof of Dependent Adult and Child Abuse training.
» RN students must also have completed at least three credits with a “C” grade or higher in each of the following courses: ENG 105 Composition I, PSY 111 Introduction to Psychology, PSY 121 Developmental Psychology, SOC 110 Introduction to Sociology, and BIO 162 Essentials of Anatomy and Physiology or both BIO 168 Human Anatomy and Physiology I w/lab and BIO 173 Human Anatomy and Physiology II w/lab.

Because SWCC has a limited number of seats available, applications are ranked. Points are assigned using the criteria listed below.

LPN criteria (LPN is offered at Creston campus only). Application points are awarded based on:
1. ACT composite or ACCUPLACER scores in writing, reading and arithmetic.
2. Any pre-nursing (arts and sciences) courses within the LPN program completed with a “C” grade or higher.
3. Highest current college degree (if any) awarded.

RN criteria (RN is offered at Creston campus and at Red Oak Center). Application points are awarded based on:
1. Same as LPN numbers 1 and 3 above.
2. Minimum PN Exit HESI score of 800.
3. Any pre-nursing (arts and sciences) courses within the RN program completed with a “C” grade or higher.
4. Assessment of LPN educational preparation:
   a. Students currently enrolled in LPN program: core nursing course grade at completion of the spring semester.
   b. Licensed LPNs: LPN diploma grade point average (GPA).
5. Status as current SWCC LPN student or SWCC LPN alumni.

Optional Pre-Nursing (Arts and Sciences) Courses
These courses may be taken prior to program admission. Points received for completion of these classes will be used during admission ranking.

Courses that may be taken as a pre-nursing student include:

<table>
<thead>
<tr>
<th>Courses LPN students need:</th>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Psychology</td>
<td>PSY 111</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Developmental Psychology</td>
<td>PSY 121</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Composition I</td>
<td>ENG 105</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Introduction to Sociology</td>
<td>SOC 110</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>BIO 151</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Essentials of Anatomy and Physiology or Human Anatomy and Physiology I w/lab and Human Anatomy and Physiology II w/lab</td>
<td>BIO 162, BIO 168, BIO 173</td>
<td>3, 4, 4</td>
<td></td>
</tr>
<tr>
<td>Pharmacology Basics (optional)</td>
<td>PNN 208</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses RN students need:</th>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microbiology (w/lab)</td>
<td>BIO 186</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Essentials of Anatomy and Physiology (w/lab) or have completed BIO 168 Human Anatomy and Physiology I w/lab and BIO 173 Human Anatomy and Physiology II w/lab</td>
<td>BIO 163</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Students enrolled full-time as arts and sciences pre-nursing majors will take SDV 108 The College Experience.
Office Skills

Award: Diploma

The office skills diploma is designed for students requesting entry-level technology skills. Graduates are qualified for jobs utilizing data entry and basic receptionist skills. Southwestern offers an Associate of Applied Science degree in administrative office technology as well.

<table>
<thead>
<tr>
<th>Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
</tr>
<tr>
<td>✓ Course Name</td>
</tr>
<tr>
<td>The College Experience</td>
</tr>
<tr>
<td>Elements of Writing</td>
</tr>
<tr>
<td>Human Relations</td>
</tr>
<tr>
<td>Introduction to Computers</td>
</tr>
<tr>
<td>Keyboarding</td>
</tr>
<tr>
<td>Keyboarding II</td>
</tr>
<tr>
<td>Office Procedures</td>
</tr>
<tr>
<td><strong>Total: 19.0</strong></td>
</tr>
</tbody>
</table>

| **Spring Semester**                  |
| ✓ Course Name                        | Course # | Credits |
| Business Communications (Business)   | BUS 121  | 3       |
| Business Math and Calculators        | BUS 110  | 3       |
| Pre-Employment Strategies            | SDV 153  | 2       |
| Comprehensive Spreadsheets           | BCA 152  | 3       |
| Fundamentals of Oral Communication   | SPC 101  | 3       |
| Introduction to Accounting           | ACC 111  | 3       |
| **Total: 17.0**                      |
| **Diploma Total: 36.0**              |

Students must complete 36 credits and maintain a 2.0 grade point average to be awarded a diploma in office skills.

Students who desire to continue their education in this field should look into the Associate of Applied Science degree in administrative office technology offered at SWCC.
Professional Music
Award: Associate of Applied Arts Degree

The first two years of college music study are, in many ways, the most important years in the education of a musician. Well-learned skills and understanding provide an adequate base for a successful music vocation. Because of this, the music curriculum focuses on thoroughly developing these most essential musical skills in the student. This program is committed to preparing its students for music careers in a dynamic environment. The goal is to help the serious musician gain musical mastery, which will enable them to succeed in and contribute to the art of music, whether in performance, education, or both.

<table>
<thead>
<tr>
<th>Fall Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Name</td>
</tr>
<tr>
<td>The College Experience</td>
</tr>
<tr>
<td>Psychology of Success</td>
</tr>
<tr>
<td>Music Theory I</td>
</tr>
<tr>
<td>Jazz Keyboard I</td>
</tr>
<tr>
<td>Arranging I</td>
</tr>
<tr>
<td>Aural Skills I</td>
</tr>
<tr>
<td>Applied Piano</td>
</tr>
<tr>
<td>Applied Voice, Guitar, String Bass, Brass, Woodwinds, or Percussion</td>
</tr>
<tr>
<td>Final Project I</td>
</tr>
<tr>
<td>Music Elective*</td>
</tr>
<tr>
<td>General Education Elective**</td>
</tr>
<tr>
<td>Total:</td>
</tr>
</tbody>
</table>

*Student must complete a minimum of two credits from the list below during year one and year two.

- Applied Jazz Voice | MUA 116 | 1
- Applied Jazz Voice II | MUA 117 | 1
- Applied Jazz Piano | MUA 138 | 1
- Solo Jazz Performance and Literature I | MUA 139 | 1
- Applied Jazz Piano II | MUA 238 | 1
- Solo Jazz Performance and Literature II | MUA 239 | 1
- Concert Choir | MUS 140 | 1
- Concert Choir II | MUS 141 | 1
- Vocal Jazz Ensemble (must take concert choir in same semester) | MUS 157 | 1
- Instrumental Jazz Ensemble | MUS 163 | 1
- Instrumental Jazz Ensemble II | MUS 182 | 1
- Jazz Improvisation | MUS 190 | 1
- Jazz Improvisation II | MUS 192 | 1
- Vocal Jazz Ensemble II (must take concert choir II in same semester) | MUS 227 | 1
- Introduction to Studio Engineering Technology | MUS 303 | 2
- Advanced Studio Engineering Technology | MUS 304 | 2

<table>
<thead>
<tr>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Name</td>
</tr>
<tr>
<td>Music Theory II</td>
</tr>
<tr>
<td>Jazz Keyboard II</td>
</tr>
<tr>
<td>Arranging II</td>
</tr>
<tr>
<td>Aural Skills II</td>
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<tr>
<td>Applied Piano</td>
</tr>
<tr>
<td>Applied Voice, Guitar, String Bass, Brass, Woodwinds, or Percussion</td>
</tr>
<tr>
<td>Freshman Recital</td>
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<td>General Education Elective**</td>
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<tr>
<td>General Education Elective**</td>
</tr>
<tr>
<td>Total:</td>
</tr>
</tbody>
</table>

** The 15 credits of general education electives shall include at least three credits from each of the following areas:

- Communications | 3
- Social Sciences/Humanities | 3
- Mathematics (MAT 101 Intermediate Algebra or higher level)/Sciences | 3
- Six additional credits from any of the above categories

Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
**Professional Music (continued)**

**Award:** Associate of Applied Arts Degree

<table>
<thead>
<tr>
<th>Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Semester</strong></td>
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</tr>
<tr>
<td>✓ Course Name</td>
<td>Course #</td>
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<tr>
<td>Music Theory III</td>
<td>MUS 220</td>
</tr>
<tr>
<td>Jazz Keyboard III</td>
<td>MUA 236</td>
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<tr>
<td>Arranging III</td>
<td>MUS 280</td>
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<tr>
<td>Recording Studio Performance</td>
<td>MUS 262</td>
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<tr>
<td>Applied Piano II</td>
<td>MUA 220</td>
</tr>
<tr>
<td>Applied Voice II, Brass II, Woodwinds II, Percussion II, String Bass II, or Guitar II</td>
<td>MUA 102, 144, 171, 181, 228, or 298</td>
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<tr>
<td>Final Project II</td>
<td>MUS 296</td>
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<table>
<thead>
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<th>Spring Semester</th>
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<tbody>
<tr>
<td>✓ Course Name</td>
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<tr>
<td>Jazz Keyboard IV</td>
<td>MUA 237</td>
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<tr>
<td>Arranging IV</td>
<td>MUS 281</td>
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<tr>
<td>Introduction to Studio Engineering and Production</td>
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<tr>
<td>Fundamentals of Conducting</td>
<td>MUS 290</td>
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<tr>
<td>Applied Piano II</td>
<td>MUA 220</td>
</tr>
<tr>
<td>Applied Voice II, Brass II, Woodwinds II, Percussion II, String Bass II, or Guitar II</td>
<td>MUA 102, 144, 171, 181, 228, or 298</td>
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<td>Sophomore Recital</td>
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<td><strong>AAA Degree Total:</strong></td>
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</tr>
</tbody>
</table>

*See list on previous page.

**See list on previous page.

Students must complete 69 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Arts degree in professional music.

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Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
# Web Development

**Award: Associate of Applied Science Degree**

The Web development program is designed to train students using a variety of methods to construct Web sites for publishing. Students will utilize current software to develop professional graphics for Web sites, but the focus will be placed on developing, maintaining, and publishing sites. This program will prepare students for entry level positions in Web design and development.

## Year 1

### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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<tbody>
<tr>
<td>The College Experience</td>
<td>SDV 108</td>
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<tr>
<td>Introduction to Computers</td>
<td>CSC 110</td>
<td>3</td>
</tr>
<tr>
<td>Digital Layout</td>
<td>GRA 131</td>
<td>3</td>
</tr>
<tr>
<td>Human Relations</td>
<td>BUS 161</td>
<td>3</td>
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<tr>
<td>Intermediate Algebra</td>
<td>MAT 101</td>
<td>3</td>
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<tr>
<td>Composition I</td>
<td>ENG 105</td>
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### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Business Communications (Business)</td>
<td>BUS 121</td>
<td>3</td>
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<tr>
<td>Comprehensive Spreadsheets</td>
<td>BCA 152</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Programming Logic</td>
<td>CIS 121</td>
<td>3</td>
</tr>
<tr>
<td>PC Operating Systems</td>
<td>CIS 650</td>
<td>3</td>
</tr>
<tr>
<td>Web Design</td>
<td>GRA 151</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Marketing or E-commerce</td>
<td>MKT 110</td>
<td>3</td>
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<tr>
<td></td>
<td>BUS 150</td>
<td>3</td>
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## Year 2

### Fall Semester

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<thead>
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<tbody>
<tr>
<td>Digital Communications</td>
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<tr>
<td>Comprehensive Databases</td>
<td>BCA 167</td>
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</tr>
<tr>
<td>JAVA</td>
<td>CIS 171</td>
<td>3</td>
</tr>
<tr>
<td>Web Multimedia</td>
<td>GRA 158</td>
<td>3</td>
</tr>
<tr>
<td>Visual Basic</td>
<td>CIS 604</td>
<td>3</td>
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<tr>
<td>Web Infrastructure</td>
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### Spring Semester

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<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>Content Management Systems I</td>
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<tr>
<td>Fundamentals of Oral Communication</td>
<td>SPC 101</td>
<td>3</td>
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<tr>
<td>Advanced Data Base and SQL</td>
<td>CIS 339</td>
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<tr>
<td>Pre-Employment Strategies</td>
<td>SDV 153</td>
<td>2</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>ECN 115</td>
<td>3</td>
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<tr>
<td>Social Sciences/Humanities Elective*</td>
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</tr>
<tr>
<td><strong>Total:</strong></td>
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</table>

**AAS Degree Total:** **69.0**

*Social sciences/humanities elective options include, but are not limited to:

- Art Appreciation ART 101 3
- Introduction to Psychology PSY 111 3
- Introduction to Sociology SOC 110 3

Students must complete 69 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in Web development.
# Welding Technology

**Award: Diploma, Associate of Applied Science Degree, or Certificate**

Welding holds the world together. From agriculture to construction and manufacturing to aerospace, welding is involved. A welding career is ideal for students who have good hand and eye coordination, enjoy working with their hands, and take satisfaction in a job well done.

## Welding Technology

### Year 1

#### Diploma

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>The College Experience</td>
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</tr>
<tr>
<td>Technical Math</td>
<td>MAT 743</td>
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<tr>
<td>Introduction to Shielded Metal Arc Welding (SMAW)</td>
<td>WEL 162</td>
<td>3</td>
</tr>
<tr>
<td>Welding Blueprint Reading</td>
<td>WEL 111</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Fabrication</td>
<td>WEL 114</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Oxyacetylene Welding, Cutting and Brazing</td>
<td>WEL 139</td>
<td>2</td>
</tr>
<tr>
<td>General Industry Safety</td>
<td>IND 114</td>
<td>1</td>
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</tbody>
</table>

**Total:** 16.0

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Gas Tungsten Arc Welding</td>
<td>WEL 229</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Shielded Metal Arc Welding (SMAW)</td>
<td>WEL 224</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Gas Metal Arc Welding</td>
<td>WEL 225</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Gas Metal Arc Welding</td>
<td>WEL 227</td>
<td>3</td>
</tr>
<tr>
<td>Computer Literacy</td>
<td>CSC 107</td>
<td>3</td>
</tr>
<tr>
<td>Employment Communications</td>
<td>COM 724</td>
<td>3</td>
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</table>

**Total:** 18.0

#### Spring Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Internship</td>
<td>WEL 932</td>
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</table>

**Total:** 4.0

**Diploma Total:** 38.0

### Year 2

#### Associate of Applied Science

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Personal Finance</td>
<td>ECN 115</td>
<td>3</td>
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<tr>
<td>Flux Core Arc Welding</td>
<td>WEL 226</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Gas Tungsten Arc Welding</td>
<td>WEL 231</td>
<td>3</td>
</tr>
<tr>
<td>AutoCAD I</td>
<td>CAD 113</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective*</td>
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<td>3</td>
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</tbody>
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**Total:** 15.0

#### Fall Semester

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNC Plasma Operations</td>
<td>MFG 336</td>
<td>3</td>
</tr>
<tr>
<td>Repair Welding and Advanced Fabrication</td>
<td>WEL 264</td>
<td>4</td>
</tr>
<tr>
<td>Welding Capstone</td>
<td>WEL 800</td>
<td>4</td>
</tr>
<tr>
<td>Physical Science (w/lab)</td>
<td>PHS 125</td>
<td>4</td>
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</table>

**Total:** 15.0

**AAS Degree Total (including diploma):** 68.0

*General education elective options include, but are not limited to:

- Composition I                                   | ENG 105  | 3       |
- Western Civilization: Early Modern to Present    | HIS 111  | 3       |
- College Algebra                                  | MAT 120  | 3       |

Students must complete 68 credits and maintain a 2.0 grade point average to be awarded an Associate of Applied Science degree in welding technology.

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internship</td>
<td>WEL 932</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total:** 4.0

**Summer Session**

Students must complete 38 credits and maintain a 2.0 grade point average to be awarded a diploma in welding technology.

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Students should check with their advisors for correct semester and section numbers. This outline is for advising and schedule planning purposes only.
Welding Technology (continued)

Award: Diploma, Associate of Applied Science Degree, or Certificate

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course #</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welding Blueprint Reading</td>
<td>WEL 111</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Fabrication</td>
<td>WEL 114</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Oxyacetylene Welding, Cutting and Brazing</td>
<td>WEL 139</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Shielded Metal Arc Welding (SMAW)</td>
<td>WEL 162</td>
<td>3</td>
</tr>
<tr>
<td>General Industry Safety</td>
<td>IND 114</td>
<td>1</td>
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</table>

**Certificate Total: 12.0**

Students must complete 12 credits and maintain a 2.0 grade point average to be awarded a certificate in welding technology.
## Sample Entry

### Prefix Description Key

<table>
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<tr>
<th>Course Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
</tr>
<tr>
<td>Administrative Assistant</td>
</tr>
<tr>
<td>Associate Degree Nursing</td>
</tr>
<tr>
<td>Agriculture-Agronomy</td>
</tr>
<tr>
<td>Agriculture-Farm Management</td>
</tr>
<tr>
<td>Agriculture-Comprehensive</td>
</tr>
<tr>
<td>Agriculture-Horticulture</td>
</tr>
<tr>
<td>Agriculture-Machinery</td>
</tr>
<tr>
<td>Agriculture-Animal Science</td>
</tr>
<tr>
<td>Anthropology</td>
</tr>
<tr>
<td>Art</td>
</tr>
<tr>
<td>Automotive Technology</td>
</tr>
<tr>
<td>Business Computer Application</td>
</tr>
<tr>
<td>Biology</td>
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<tr>
<td>Business</td>
</tr>
<tr>
<td>Computer Aided Drafting</td>
</tr>
<tr>
<td>Chemistry</td>
</tr>
<tr>
<td>Cancer Information Management</td>
</tr>
</tbody>
</table>

### Course Descriptions

- Computer Programming
- Cultural Studies
- Communication
- Construction
- Criminal Justice
- Auto Collision Repair/Refinish
- Computer Science
- Film and Theatre
- Disability Services
- Early Childhood Education
- Economics
- Education
- Electrical Technology
- Electronics
- English Composition
- Environmental Science
- Non-Intensive English as a Second Language (ESL)
- Exercise Science
- Finance
- Foreign Language-Spanish
- Geography
- Graphic Communications
- History
- Health Information Technology
- Health Sciences
- Human Services
- Humanities
- Industrial Technology
- Literature
- Mathematics
- Manufacturing
- Management
- Marketing
- Music-Applied
- Music-General
- Computer Networking
- Physical Education Activities
- Coaching/Officiating
- Physical Education and Health-General
- Intercollegiate Physical Education
- Philosophy
- Physical Science
- Physics
- Practical Nursing
- Political Science
- Psychology
- Reading
- Religion
- Student Development
- Sociology
- Speech
- Web Development
- Welding
Sample Entry:

- **000-099** developmental courses
- **100-899** courses intended to meet specific requirements for certificates, diplomas, and degrees in career, technical, and transfer programs.
- **900-999** generic focus courses, such as special topics, on-the-job training (OJT), and internships.

### ABC 123*

**Intro to Course Descriptions**

This course will aid the student in deciphering the Southwestern course numbering system. Special topics include prefixes, course numbers, and the ratio between lecture, lab, and internship within the description system. (543:321) (1, 2, 16, 8)

*denotes course may be repeated for credit

denotes course offered through Iowa Community College Online Consortium

course credits

Number of contact hours per week in a 16-week semester:
- 1 = # of lecture hours
- 2 = # of lab hours
- 16 = # of clinical hours (will appear only if applicable)
- 8 = # of internship hours (will appear only if applicable)

### The following course descriptions appear in alphabetical order by their three-letter prefixes:

**Prefix Description Key**

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course Description</th>
<th>Code</th>
<th>Course Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>Accounting</td>
<td>CSC</td>
<td>Computer Science</td>
</tr>
<tr>
<td>ADM</td>
<td>Administrative Assistant</td>
<td>DRA</td>
<td>Film and Theatre</td>
</tr>
<tr>
<td>ADN</td>
<td>Associate Degree Nursing</td>
<td>DSV</td>
<td>Disability Services</td>
</tr>
<tr>
<td>AGA</td>
<td>Agriculture-Agronomy</td>
<td>ECE</td>
<td>Early Childhood Education</td>
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<td>AGB</td>
<td>Agriculture-Farm Management</td>
<td>ECN</td>
<td>Economics</td>
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<td>AGC</td>
<td>Agriculture-Comprehensive</td>
<td>EDU</td>
<td>Education</td>
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<td>AGH</td>
<td>Agriculture-Horticulture</td>
<td>ELE</td>
<td>Electrical Technology</td>
</tr>
<tr>
<td>AGM</td>
<td>Agriculture-Mechanics</td>
<td>ELT</td>
<td>Electronics</td>
</tr>
<tr>
<td>AGP</td>
<td>Agriculture-Precision Ag</td>
<td>ENG</td>
<td>English Composition</td>
</tr>
<tr>
<td>AGS</td>
<td>Agriculture-Animal Science</td>
<td>ENV</td>
<td>Environmental Science</td>
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<td>ANT</td>
<td>Anthropology</td>
<td>ESL</td>
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<td>Art</td>
<td>EXS</td>
<td>Exercise Science</td>
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<td>Automotive Technology</td>
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<td>Foreign Language-Spanish</td>
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<tr>
<td>BCA</td>
<td>Business Computer Application</td>
<td>GEO</td>
<td>Geography</td>
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<tr>
<td>BIO</td>
<td>Biology</td>
<td>GRA</td>
<td>Graphic Communications</td>
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<tr>
<td>BUS</td>
<td>Business</td>
<td>HIS</td>
<td>History</td>
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<tr>
<td>CAD</td>
<td>Computer Aided Drafting</td>
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<td>Health Information Technology</td>
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<td>CHM</td>
<td>Chemistry</td>
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<td>Cancer Information Management</td>
<td>HSV</td>
<td>Human Services</td>
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*denotes course may be repeated for credit

denotes course offered through Iowa Community College Online Consortium

course credits

The following course descriptions appear in alphabetical order by their three-letter prefixes:

Sample Entry:

- **000-099** developmental courses
- **100-899** courses intended to meet specific requirements for certificates, diplomas, and degrees in career, technical, and transfer programs.
- **900-999** generic focus courses, such as special topics, on-the-job training (OJT), and internships.
Course Descriptions

**Accounting**

**ACC 111 Introduction to Accounting**
A presentation of basic accounting procedures and principles designed to introduce students to the accounting cycle for both a service enterprise and a merchandising enterprise organized as a sole proprietorship. Recommended for secretarial, non-business majors, and those students wishing to review accounting principles before taking ACC 131 Principles of Accounting I. (300:105) (3, 0)

**ACC 131 Principles of Accounting I**
Development of double entry accounting theory; recording and posting transactions; adjusting and closing books at the end of the fiscal period; preparation of financial statements; work in accounting principles involving cash, receivables, investments, inventories, plant assets, and payroll. (300:112) (4, 0)

**ACC 132 Principles of Accounting II**
Prerequisite: ACC 131 Principles of Accounting I. A continuation of ACC 131 Principles of Accounting I with emphasis on accounting for the corporate form of business, an introduction to the process of decision-making, managerial accounting including cost behavior and budgeting. (300:113) (4, 0)

**ACC 142 Financial Accounting**
An introduction to the use of accounting in the decision making process. Course competencies will be developed in the areas of identifying the role of accounting in society, basic accounting and business terminology, concepts behind financial information, accepted accounting practices, analysis and interpretation of financial statements of sole proprietorships and corporations. (3, 0)

**ACC 161 Payroll Accounting**
Prerequisite: ACC 131 Principles of Accounting I. This introductory course covers the processes of completing payroll records and implementing payroll procedures. Topics include methods of computing compensations, state and federal laws affecting payroll, mandatory and voluntary payroll deductions, methods of keeping records, and preparation of internal and governmental reports. (300:241) (3, 0)

**ACC 211 Intermediate Accounting I**
Prerequisite: ACC 132 Principles of Accounting II. A course designed for the two-year accounting program with emphasis on accounting theory and practice. Special treatment of the components of the balance sheet from current assets through long-term liabilities. (300:220) (3, 0)

**ACC 221 Cost Accounting**
Prerequisite: ACC 132 Principles of Accounting II. An in-depth study of the various components of cost, types of cost accounting systems, related managerial functions of planning, controlling, and decision-making. (300:235) (3, 0)

**ACC 231 Intermediate Accounting I**
Intermediate Accounting I is a review of accounting principles and reporting processes including an in-depth study of cash, receivables, inventories, long-term assets, and investments. (4, 0)

**ACC 261 Income Tax Accounting**
Prerequisite: ACC 131 Principles of Accounting I or instructor approval. A study of the application of Federal and State tax laws for individuals and corporations. The emphasis is on general tax procedures for individuals. (300:240) (3, 0)

**ACC 265 Income Tax Accounting**
Prerequisite: ACC 131 Principles of Accounting I. Covers federal income taxes as they apply to the individual, partnerships, and business. Major emphasis is placed on the individual return including supporting schedules and statements. Considerable effort is expended in actual form completion and understanding of IRS requirements. (4, 0)

**ACC 311 Computer Accounting**
Prerequisite: ACC 131 Principles of Accounting I or ACC 111 Introduction to Accounting or equivalent. An introduction to computer applications of accounting procedures. Includes analysis and design of company files utilizing QuickBooks and other software packages. Special emphasis on payroll, including setup, processing, and reporting. (300:210) (3, 0)

**ACC 928 Independent Study**
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (300:299)

**ACC 949 Special Topics**
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

**Administrative Assistant**

**ADM 105 Introduction to Keyboarding**
This is a beginner course for students with little or no previous keyboarding instruction. Students will develop mastery of the keyboard by touch control utilizing proper keyboarding techniques. (180:105) (1, 0)

**ADM 112 Keyboarding**
Students will develop mastery of the keyboard by touch control utilizing proper keyboarding techniques. Students will also be introduced to the concepts and basic operations of document processing. (180:210) (3, 0)

**ADM 116 Keyboarding II**
Prerequisite: ADM 112 Keyboarding or equivalent. This course emphasizes techniques, speed, and accuracy. Student activities include formatting business communications, tables, and reports utilizing features found in popular office software. (180:211) (3, 0)

**ADM 162 Office Procedures**
This course emphasizes the responsibilities and opportunities of the office professional. Skills presented range from using Internet and email, integrated software packages, human relations to teamwork and critical thinking skills. Additional skills focus on the virtual office, human relations. and administrative support function of the office professional. There are no prerequisites,
however, concurrent enrollment in CSC 110 Introduction to Computers and ADM 112 Keyboarding/ADM 116 Keyboarding II (or equivalent) is strongly recommended. (180:120)(3, 0)

**Associate Degree in Nursing**

**ADN 433**  
**Advanced Maternal-Child Health I**  
This course builds upon the student's previous knowledge and experience with basic maternal and child health. The student will apply the nursing process in clinical settings while performing the skills/procedures registered nurses do in selected obstetrical settings. Complications of pregnancy, labor, delivery, and the newborn will be presented. Within the scope of the registered nurse's role with obstetrical consumers, nursing process and health teaching will be explored and practiced. (240:290)(3.75, 0.75)

**ADN 443**  
**Advanced Maternal-Child Health II**  
A continuation of ADN 433 Advanced Maternal-Child Health I, focusing upon the family unit and disease processes affecting children. (240:291)(1.75, 0, 3.75)

**ADN 476**  
**Mental Health Nursing**  
This course will provide a study of and interaction with individuals with dysfunctional behaviors. As a valuable member of the professional health team, the student will learn modalities of psychotherapies. Clinical treatment units will include alcohol and drug abuse, adult psychiatric, outpatient, and other appropriate settings. An educational approach will be utilized to develop psychiatric nursing to be therapeutic, personalized, comprehensive, rehabilitative, and preventive. When possible, the student will assist the therapist in treating the patient within the home and community environment, using the nursing process. Psychotropic drugs and their effects upon the behavioral and physical systems will be studied. Emphasis will be placed on learning basic counseling techniques and therapeutic communications. Although this course content is primarily about psychiatric patients, the same principles will generally apply in all realms of human interrelationships. (240:273)(5.25, 0, 3.75)

**ADN 561**  
**Medical Surgical Nursing**  
This course will build upon the student's previous knowledge of and experience with basic medical surgical care. The student will be required to apply the nursing process in classroom and clinical settings as it applies to the registered nurse's role with medical surgical consumers. Physical assessment, disease information, and nursing interventions will be presented and applied. The physical side effects of therapeutic medications will be included. Wellness issues and communication skills, including teaching techniques, will be presented. (240:270)(5, 1, 4.5)

**ADN 563**  
**Comprehensive Nursing**  
A continuation of ADN 561 Medical Surgical Nursing. This course provides the student with the opportunity for expanding the advanced student nurse's role within hospitals and within the community health setting. The student will become an integral part of the nursing team as he/she provides nursing care using nursing principles with increasing independence. (240:276)(7, 0, 10.5)

**ADN 831**  
**Trends and Issues**  
The Level II student will explore the historical perspective of nursing, current issues in nursing, and the health care delivery system. Problem solving related to nursing practice will be discussed and role played. An understanding of legal aspects and responsibility for continued growth and professionalism will help prepare the student for transition from student to licensed registered nurse. (240:281)(3, 0, 0)

**ADN 850**  
**Employment Empowerment**  
This course will reinforce prior knowledge acquired as part of the nursing curriculum. The purpose of this course is to empower students as they prepare for the NCLEX exam by applying previously acquired science and nursing content to the patient care process. By facilitating successful completion of the NCLEX exam, graduates will become employed in the role of a registered nurse as soon as possible. (1, 0)

**Agriculture-Agronomy**

**AGA 114**  
**Principles of Agronomy**  
A foundation course in agronomy applying crop, soil, and environmental sciences in understanding agricultural systems in the world. Includes introductory concepts of plant, soil, tillage, pest, environmental, and sustainable aspects of crop production. The laboratory portion of the course will consist of hands-on learning experiences via the college farm, field trips, or the utilization of interactive computer-based programs. (3, 0)

**AGA 154**  
**Fundamentals of Soil Science**  
This course will assess the importance, quality, and quantity of soil and water as natural resources for ecosystems and societies. It will help students understand the principles of soil erosion processes and management practices to decrease erosion in cropland and farming systems. The course will focus on the principles of the soil water cycle to improve water use efficiency in agriculture. Another focus is the utilization of soil resource assessment tools to make land management decisions in soil and water conservation practices. (3, 0)

**AGA 212**  
**Grain and Forage Crops**  
Prerequisite: AGA 114 Principles of Agronomy. This course emphasizes production and management of corn, soybeans, oats, and forage crops in Iowa. Determination of plant characteristics, growth and development, management practices, and crop utilization are explored with the college farm used as a lab setting. (4, 0)

**AGA 286**  
**Introduction to Sprayer and Fertilizer Application**  
Sprayer and fertilizer application equipment will be analyzed and emphasis given to proper calibration, safety, proper application, and qualifying conditions. Utilization of spraying systems guidebooks will be stressed. Course will prepare students for pre-application operations and maintaining the equipment for error-free operation. (0, 2)

**AGA 376**  
**Integrated Pest Management**  
Prerequisite: AGA 114 Principles of Agronomy. This course includes chemical control of weeds and insects and principles of safety and ecological ramifications of chemicals used in modern farming operations. The course also includes insect and weed identification in the field. Material will also be presented to prepare the student to pass the Iowa Commercial Pesticide Core, Insects and Agriculture Weed tests. (3, 0)

**AGA 450**  
**Issues in Sustainable Agriculture**  
The transformation from subsistence to industrialized agriculture is examined to determine the agroecological consequences. The college farm is used to determine current practices and possible improvements in sustainability. Field trips to sustainable farms and guest speakers highlight this course. (850:191)(3, 0)
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (850:299)

AGB 437 Commodity Marketing
Commodity Marketing examines basis, fundamental and technical price analysis, commodity futures, futures options, alternative cash contracts, sources and uses of marketing information, and relevant agricultural strategies. (3, 0)

AGB 466 Agricultural Finance
This course is a study of the terminology and tools of agricultural finance. It emphasizes the preparation of financial statements, cash flows, budgets and bookkeeping principles. It also discusses financial risk strategies and credit costs. (3, 0)

AGB 470 Farm Records, Accounts, Analysis
This course is a study of the use of the principles of farm management in developing a farm or farm business operation. (3, 0)

AGB 928 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (850:299)

AGB 932 Internship
This course provides students with opportunities to gain on-the-job experience in the agriculture industry. Students will gain an understanding of qualities and skills needed for success in the agricultural field. Coordination and guidance will be provided by department instructors. (850:200) (0, 0, 0, 16)

AGB 949 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.
Agriculture-Horticulture

AGH 106
Introduction to Horticulture
Introduces students to basic horticulture. Includes plant anatomy and physiology, plant classification and identification, and basic plant care. (2, 2)

AGH 284
Pesticide Application Certification
This course covers the identification and biology of common insect, disease and weed pests of turf grasses and ornamentals. It reviews materials and testing procedures required to become a certified commercial pesticide applicator. (3, 0)

AGH 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (850:299)

AGH 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Agriculture-Mechanics

AGM 154
Farm Equipment Management
This course is constructed to teach students how to maintain farm equipment. The course will include preventative maintenance and trouble-shooting. Equipment includes the baler, tractor, planter, combine, and mower, among other equipment. (0, 2)

AGM 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required.

AGM 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Agriculture-Precision Ag

AGP 329
Introduction to GPS
An introduction to the use of GPS and VRT as it impacts agricultural producers. Students will use field mapping software and GPS systems as part of the class. (3, 0)

AGP 334
Introduction to Precision Farming
Prerequisite: AGA 114 Principles of Agronomy. This course introduces the use of current technologies such as Global Positioning Systems (GPS), Geospatial Information Systems (GIS), and Variable Rate Technology (VRT). Students study various systems and applications for precision farming, equipment used, software, legal and social issues, and economic returns. (1, 0)

AGP 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (850:299)

AGP 949
Special Topics
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Agriculture-Animal Science

AGS 112
Survey of the Animal Industry
The history of animals and their interaction with humans will start the course. The progression of the animal industry relating to U.S. agriculture from its conception to modern time follows. Terminology, care, breeding, production, and marketing will be explored for the following species: beef cattle, dairy cattle, equine, poultry, swine, sheep, companion animals, and specialty animals. (4, 0)

AGS 225
Swine Science
Prerequisite: AGS 112 Survey of the Animal Industry. This is a basic course in swine production and management that includes selecting, breeding, feeding, managing, and marketing of swine. Laboratory will provide hands-on farm experiences to help develop production skills in the rapidly changing technology of the swine industry. Emphasis will be placed on both purebred and commercial production. This course allows students to learn modern swine production and management techniques they can take back to the farm or into the swine industry. (3, 0)

AGS 226
Beef Cattle Science
Prerequisite: AGS 112 Survey of the Animal Industry. The breeding, health, nutrition, facilities, and marketing of beef cattle are examined in this course. Issues in the production segments of: seedstock, cow-calf, yearling/stocker, and feedlot operations are emphasized in the context of production management. Hands-on exposure to artificial insemination will be demonstrated. Students will select a beef operation, determine an existing analysis, and offer recommendations for improvement as a capstone activity. (850:181)(3, 0)

AGS 242
Animal Health
Prerequisite: AGS 112 Survey of the Animal Industry. An introduction to animal health that will cover common disease conditions, symptoms, and treatments; as well as understanding the disease process and relationship between host, pathogen, and environment. Students will also be able to understand basic immunology. (3, 0)

AGS 280
Livestock Merchandising
Merchandizing non-market animals is explored in this course. Students are exposed to various methods of merchandizing high quality animals including private treaty sales, consignment sales, and production sales. Planning and participation in the college’s livestock sale are requirements for students in this course. (850:186)(3, 0)
AGS 305
Livestock Evaluation
Prerequisite: AGS 112 Survey of the Animal Industry. Beef, swine, and sheep are used to determine suitability of breeding and market animals. Tools and techniques of livestock judging are taught and practiced. Involvement in the college’s livestock judging team is possible with concurrent enrollment in this course. (850:210) (3, 0)

AGS 319
Animal Nutrition
Prerequisites: AGS 112 Survey of the Animal Industry and AGS 225 Swine Science or AGS 226 Beef Cattle Science. This course will cover classification and function of nutrients, deficiency symptoms, digestive processes, characterization of feedstuffs, and formulation of diets for domestic animals. (3, 0)

AGS 331
Animal Reproduction
Prerequisites: AGS 112 Survey of the Animal Industry and AGS 225 Swine Science or AGS 226 Beef Cattle Science. Study of organs, functions, endocrinology, and common management practices related to reproduction. Biotechnology within the industry will also be discussed. Students are required to go through A.I. school and will have the opportunity to receive their artificial insemination certification. (3, 0)

AGS 345
Feeds and Feeding Lab
Prerequisite: AGS 112 Survey of the Animal Industry. This course is designed to introduce students to the concepts, principles, vocabulary, and skills needed to feed livestock effectively and characteristics of feedstuffs used in livestock enterprises. (0, 2)

AGS 355
Animal Breeding and Genetics
Prerequisites: AGS 112 Survey of the Animal Industry and concurrent enrollment in AGS 225 Swine Science or AGS 226 Beef Cattle Science. This course will focus on applied genetic principles of improving farm animals including crossbreeding, inbreeding, and other mating plans. (3, 0)

AGS 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (850:299)

AGS 949
Special Topics
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Anthropology

ANT 105
Cultural Anthropology
This course will consist of two parts. The first part, physical anthropology, will deal with man’s origin and development in prehistoric times, the origin of races, and the diffusion of humans around the globe. The second part, cultural anthropology, will trace the rise of the human species through the use of tools and culture. This part will also examine some contemporary non-Western cultures. (620:230) (3, 0)

Art

ART 101
Art Appreciation
Art Appreciation is an introduction to the visual arts and explores the nature of art and the mechanisms of creativity, the materials and methods of making art, the purpose of art in various cultures both ancient and contemporary, and the significance of visual literacy in today’s world. (720:110) (3, 0)

ART 102
Art for Elementary Education
An introduction to the study of education through the visual arts. Course content includes an exploration of art history, the art of children, child development, cultural and ethnic influences, design and expression and art production. Motivating children and teaching of the visual arts is included, as is the development of a process for planning and assessment. (720:240) (3, 0)

ART 110
Contemporary Art and Issues
Contemporary Art and Issues is a history of visual arts course from 1940 to the present. Lives, careers, achievements, and controversies of artists and the art world will be investigated. Special attention will be given to women in the arts and multiculturalism in the arts. Discussion of current and possible future trends will also be covered. (720:169) (3, 0)

ART 117
Computer Graphic Design
Computer Graphic Design is a studio-oriented course designed to use the computer as a tool for graphics production. Typography, page layout, fine art, graphic design, and digital photography are among the topics discussed in class. (720:175) (3, 0)

ART 120
2-D Design
This foundation studio course addresses visual dynamics on the two-dimensional picture plane. Through the design process students explore visual elements and principles of organization. Projects cover technical skills, idea generation and development, and presentation. (720:170) (3, 0)

ART 123
3-D Design
Prerequisite: ART 120 2-D Design. This course introduces the fundamentals of three-dimensional (3-D) design with an emphasis on spatial awareness, problem solving, and the development of ideas related to traditional and non-traditional approaches to making art. Readings, discussions, and group critiques complement the studio work. (720:171) (3, 0)

ART 124
Computer Art
Computer Art is a studio-oriented course designed to use the computer as a tool for the production of studio quality, two-dimensional imagery. Technology in the arts is a relatively new outlet for many artists, this course aims to experiment with a variety of software and peripherals to generate personally authentic works of art. (720:174) (3, 0)

ART 130
Introduction to Computer Animation
This course is an introduction to motion graphics and 2-D animation. Course content includes emphasis on story development, importing source files like photographs, illustrations, and video clips; keyframing, animating, and effects; compression and outputting for video and Web are also discussed. (720:176) (3, 0)

ART 133
Drawing
Drawing is a foundation course dealing with the practices and applications of basic drawing principles and techniques. Studio research of the various media and compositional aspects is included. (720:130) (3, 0)
ART 143
Painting
This is a studio course in beginning painting exploring the various elements of painting from color, composition, and technique, to creative invention and expression. (720:140)(3, 0)

ART 144
Painting II
Prerequisite: ART 143 Painting. Painting II is a studio course further exploring the techniques of painting as well as the various subject matter, media, and materials. (720:141)(3, 0)

ART 145
Water Color
Water Color is a studio course of beginning painting exploring watercolor media. Included in this investigation: various elements of painting from color, composition and technique to creative invention and expression. (720:142)(3, 0)

ART 157
Printmaking
Printmaking is a studio-oriented course introducing students to printmaking media, techniques such as intaglio and relief, and composition. Basic knowledge, production procedures, drawing skills, and experimentation will be included. (720:150)(3, 0)

ART 163
Sculpture
Prerequisites: ART 120 2-D Design and ART 123 3-D Design. One of the prerequisites may be taken the same semester as the class itself. This course will broaden the student's knowledge and understanding of how to make and think about three-dimensional works of art through aesthetic and conceptual considerations. Modeling and constructive methods will be learned using various materials such as wood, clay, plastic, etc. by creating four different sculpture projects. (720:165)(3, 0)

ART 173
Ceramics
A beginning course in studio ceramics. Basic methods of hand building and processes for functional and sculptural products are learned through studio experiences. (720:160)(3, 0)

ART 174
Ceramics II
Prerequisite: ART 173 Ceramics. This course develops the methods of clay forming as a means of expression. Topics may include hand building, glazing, design and the functional and aesthetic aspects of ceramics. Upon completion, students should demonstrate improved craftsmanship and aesthetic quality in the production of pottery. (720:161)(3, 0)

ART 186
Digital Photography
Digital Photography provides students the basic tools and techniques of photography as a digital medium. Students will learn the operation and function of digital cameras and how to use them technically and creatively. Projects will be completed relating photography as an art form and aesthetic medium. (3, 0)

ART 198
Art Explorations I
This class will take the fear out of art. Students will explore mediums such as painting, drawing, printmaking, and collage. Art historical references will also be used to help reinforce learning. Students will leave with a better understanding of the medium that suits them best. (1, 0)

ART 199
Art Explorations II
This class will take the fear out of art. Students will explore mediums such as ceramics, two-dimensional design, three-dimensional design, and watercolor. Art historical references will also be used to help reinforce learning. Students will leave with a better understanding of the medium that suits them best. (1, 0)

ART 203
Art History I
Prehistoric through fifteenth century art. This course is a survey of the development of sculpture, painting and architecture from their origin through the Greek Classical, Early Christian, Medieval, Romanesque, and Gothic periods. (720:120)(3, 0)

ART 204
Art History II
Renaissance through Contemporary art. A survey of the visual arts from the sixteenth century through the Baroque, Impressionism, Cubism, Expressionism, to the works of the present day. (720:121)(3, 0)

ART 207
Survey of Art
A topical survey of outstanding works from major periods of Western art with emphasis placed on the purposes of art and the roles of artists. (3, 0)

ART 230
Principles of Art Education
The examination of theories, concepts, and principles of art education within the context of the history of art education. The impact of philosophies of art, art education, and general education, relevant psychological and sociological research, current issues and trends in the field, and the nature of art are investigated as they apply to art education. (3, 0)

ART 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (720:299)

ART 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Automotive Technology

AUT 104
Introduction to Automotive Technology
This course provides instruction in the selection and use of mechanics tools and precision measuring devices. Practical, hands-on activities with automotive engines and shop safety will be emphasized. (120:156)(2, 2)

AUT 140
Welding for Automotive Mechanics
This sheet metal welding course is designed to give the student the necessary theory and hands-on training to perform competent quality cutting and welding repairs to automotive equipment in the auto industry. The knowledge gained from lectures as well as lab experience from operating oxyacetylene cutting and welding torches, plasma cutters, and gas metal arc welders (commonly called MIG welding) will help them in making the correct repair to a customer's vehicle following manufacturer's procedures. This course will use I-CAR training procedures to meet NATEF standards for required training. Safety is stressed throughout the course. (120:112)(1, 2)

AUT 163
Automotive Engine Repair
Prerequisite: AUT 104 Introduction to Automotive Technology. This course will provide instruction...
in the theory and operation of the four stroke automotive engine. Students will gain hands-on experience in a lab setting learning how to service and repair cylinder heads. (120:122)(2, 2)

AUT 173 3
Advanced Automotive Engine Repair
Prerequisite: AUT 163 Automotive Engine Repair. This course is designed to provide the student with instruction in the proper diagnosis and repair of engine malfunctions. Students will learn diagnostic procedures using modern, high tech equipment and will follow through with the actual adjustments and repairs of defective components and assemblies in a supervised lab setting. (120:210)(1, 4)

AUT 190 2
Hybrid Fundamentals
Prerequisites: AUT 503 Automotive Brake Systems and AUT 652 Advanced Automotive Electricity. This course introduces the fundamentals of hybrid electric vehicles. It will familiarize students with general hybrid history, benefits, safety precautions, and the description of hybrid components. This course will also study the use of, manufacturing of, and benefits of using alternative fuels. (1, 2)

AUT 242 6
Basic Automotive Powertrain
Prerequisite: AUT 104 Introduction to Automotive Technology. This course is designed to introduce the student to hydraulics and mechanical systems used in automotive transmissions. Theory and operating principles of powertrain components such as engines, clutches, transmissions, differentials, transfer cases, transaxles, and drive axles will be presented. General diagnosis procedures and basic repair operations will be a part of the lab experience. (120:216)(4, 4)

AUT 243 6
Advanced Automotive Powertrain
Prerequisite: AUT 242 Basic Automotive Powertrain. This course will cover the principles, components and operation of modern transmissions and transaxles (both manual and automatic), clutch assembly, driveshaft, transfer cases, C-V joints, and drive axle systems. Lab experience will include in-car and bench diagnosis, maintenance, adjustments, and reconditioning using specialty tools and equipment. (120:217)(2, 8)

AUT 404 4
Automotive Suspension and Steering
Prerequisite: AUT 503 Automotive Brake Systems. This course will provide instruction in the theory of operation and service procedures of automotive alignment and suspension systems. (120:168)(2, 4)

AUT 503 3
Automotive Brake Systems
Prerequisite: AUT 104 Introduction to Automotive Technology. This course will provide instruction in the theory of operation and service procedures of automotive braking systems. (120:167)(2, 2)

AUT 535 5
Advanced Automotive Brakes and Alignment
Prerequisite: AUT 404 Automotive Suspension and Steering. This course is designed to require the student to build on and apply the knowledge and skills gained in AUT 503 Automotive Brake Systems and AUT 404 Automotive Suspension and Steering. Through supervised lab experiences, students will study advanced techniques in the diagnosis, service, and repair of brake and suspension systems. (120:140)(2, 6)

AUT 603 3
Basic Automotive Electricity
Prerequisite: AUT 104 Introduction to Automotive Technology. This course will provide instruction in theory and operation of automotive electrical circuits. Safety, meters, and service information will be emphasized. (120:157)(2, 2)

AUT 652 3
Advanced Automotive Electricity
Prerequisite: AUT 603 Basic Automotive Electricity. This course is designed to provide instruction in the diagnosis, repair, and service of electrical and electronic components found on current vehicles. (120:158)(2, 2)

AUT 704 4
Automotive Heating and Air Conditioning
Prerequisite: AUT 652 Advanced Automotive Electricity. This course will provide instruction in the theory of operation of auto air conditioning and heating systems. Students will learn how to diagnose and service auto air conditioning and heating systems. (120:169)(2, 4)

AUT 823 4
Advanced Automotive Tune-up
Prerequisite: AUT 844 Automotive Electronic Engine Controls. This course is designed to train the student in preventative maintenance, tune-ups, and engine performance testing procedures. Theory, diagnosis, and repair of automotive mechanical, ignition, electrical, and fuel systems will be covered. Students will be instructed on the proper use of computerized engine diagnostic tools and related technology used in the modern day automotive shop. (120:203)(2, 4)

AUT 834 4
Automotive Fuel Systems
Prerequisite: AUT 163 Automotive Engine Repair. This course will provide the instruction to introduce the student to basic fuel system principles. Students will study theory and will gain hands-on experience by cleaning, repairing, and adjusting automotive fuel systems. (120:130)(2, 4)

AUT 844 6
Automotive Electronic Engine Controls
Prerequisites: AUT 652 Advanced Automotive Electricity and AUT 834 Automotive Fuel Systems. This course is designed to require students to apply knowledge and skills gained in AUT 603 Basic Automotive Electricity, AUT 652 Advanced Automotive Electricity, and AUT 834 Automotive Fuel Systems. Through supervised labs, students will experience hands-on diagnosis and repair of the computers, sensors, and control devices of late model cars. (120:200)(3, 6)

AUT 870 2
Automotive Service Management
This course is designed to acquaint the student with the day-to-day operations of the automotive service industry. Instruction will be provided for customer relations, shop management, service write-ups, warranty procedures, and flat rate time guides. Students will practice procedures in a live lab setting. (120:236)(2, 0)

BCA 147 2
Basic Spreadsheets
This course is designed to acquaint the student with the basic concepts of an electronic spreadsheet program. Hands-on practice in designing, building, and editing spreadsheets will develop the basic skills necessary to construct spreadsheets for home and business use. (2, 0)

BCA 152 3
Comprehensive Spreadsheets
Prerequisite: CSC 110 Introduction to Computers or consent of the instructor. Concepts of spreadsheets and application in the business world are covered. Introductory topics include creation of spreadsheets, data manipulation, printing, sharing, formatting, use of predefined functions, and charts. Advanced topics will include creating macros, filtering, importing and exporting data, and spreadsheet analysis. Application to business situations will be emphasized. Microsoft Excel will be used for this course. (3, 0)
BCA 167
Comprehensive Databases
Prerequisite: CSC 110 Introduction to Computers or consent of the instructor. An in-depth study of database management concepts, their uses, roles, limitations, advantages, and disadvantages. Students, through hands-on experience, will learn to use database management software to design, create, set up, utilize, query, program, customize, and integrate databases. Application to business situations will be emphasized. Access 2013 will be used for this course. (3, 0)

BCA 214
Advanced Computer Business Applications
Prerequisite: BCA 215 Computer Business Applications or equivalent or instructor approval. This course covers post-advanced applications utilizing Microsoft Office. The primary focus will be on spreadsheet and database applications. Emphasis will be placed on advanced spreadsheet topics such as macros, filtering, importing and exporting data, and spreadsheet analysis. Database emphasis will be placed on customizing forms and reports, integrating and analyzing data, and managing and securing a database. (3, 0)

BCA 215
Computer Business Applications
Prerequisite: CSC 110 Introduction to Computers or equivalent or instructor approval. This is a course for experienced computer users. This is an upper level applications course utilizing Microsoft Office programs. Special attention will be given to program integration and applying skills to business situations. (360:120) (3, 0)

BCA 221
Integrated Computer Business Applications
Prerequisite: BCA 152 Comprehensive Spreadsheets or BCA 167 Comprehensive Databases or instructor approval. This course is designed for future office workers needing an understanding of the many facets of office technology. Emphasis is on taking real business simulations or office jobs and using available equipment and software to integrate these technologies in an office environment. (180:134) (3, 0)

BCA 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (360:299)

BCA 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Biology

BIO 105
Introductory Biology (w/lab)
This course is an introduction to basic biological principles with emphasis on topics and issues of current interest and applications of biology related to the medical, ethical, and social dilemmas of humans integrating with the biosphere. The required laboratory will stress the process of science and exposure to living organisms. Topics to be considered are structure, function, and metabolism of cells, genetics, impact of molecular biology and genetic engineering, plants, animals, diversity, and evolution. Three lecture hours, two lab hours. (800:100) (3, 2)

BIO 112
General Biology I (w/lab)
Introduction to the principles of the biological sciences, including the study of ecosystems, diversity among plants and animals, evolution and mammalian structure and function. The required laboratory provides concrete experiences for course concepts and problem solving using the scientific method. This course is intended for those students in majors requiring a two-semester sequence. Three lecture hours, two lab hours. (800:110) (3, 2)

BIO 113
General Biology II (w/lab)
Prerequisite: BIO 112 General Biology I (w/ lab). This course examines the chemistry, form, and function of cells and the energetics and genetics of living organisms. The required laboratory provides concrete experiences for course concepts and problem solving using the scientific method. Three lecture hours, two lab hours. (800:111) (3, 2)

BIO 114
General Biology IA
Introduction to basic principles of biology. Topics include chemical applications in biology, cellular biology, bioenergetics, cell division, and genetics. (3, 2)

BIO 115
General Biology II A
Prerequisite: BIO 114 General Biology IA. This course is a continuation of BIO 114 General Biology IA. Course topics include evolution, biological diversity, plant and animal anatomy, and physiology and ecology. (3, 2)

BIO 130
Animal Biology (w/lab)
A progressive study of the animal phyla, including structure, function, metabolism, diversity, and evolutionary relationships. Laboratory studies the anatomy and classification of selected animals through animal dissections. Three lecture hours, two lab hours. (800:150) (3, 2)

BIO 146
Genetics
Prerequisite: At least one semester of college biology (such as BIO 105 Introductory Biology or BIO 112 General Biology I) should be completed before taking this class. This course is an introduction to genetics. Topics include DNA, chromosomes, Mendelian genetics, mutations, molecular genetics, recombinant DNA, Genetically Modified Organisms (GMOs), genetic engineering, molecular genetics, and genetic disease. (3, 0)

BIO 151
Nutrition
Prerequisite: One year of high school chemistry or CHM 112 Introduction to Chemistry or equivalent. Study of an individual's health as related to the influence of nutrients and energy metabolism. Emphasis is on normal nutrition, although discussion of nutrition during disease is included. Designed for students in health related fields. (800:140) (3, 0)

BIO 157
Human Biology (w/lab)
An introductory biology course presenting basic concepts of the human body and its relationship to the environment. Topics include human chemistry, cell structure and function, histology, cell reproduction, and genetics. These concepts are used to study the principles of the major organ systems and how the human body functions as a whole and then how the body functions and interacts with the ecosystem. Aspects of health and disease are presented including nutrition, cancer, and aging. Laboratory includes gross and microscopic structure and function with dissection. Three lecture hours, two lab hours. (3, 2)

BIO 162
Essentials of Anatomy and Physiology
(Designed for health-related fields.)
Prerequisite: One year of high school biology
or one year of high school chemistry or CHM 112 Introduction to Chemistry or instructor approval. Introduces the student to the structure, function, and organization of the human body and all body systems. (800:130) (3, 0)

BIO 163 Essentials of Anatomy and Physiology (w/lab) 
(Designed for nursing and allied health students.) Prerequisites: BIO 162 Essentials of Anatomy and Physiology and high school chemistry or equivalent. This course is a progressive study of the cellular, tissue, and organ/system levels of the human body with emphasis on physiology as well as anatomy. Laboratory includes study of both gross and microscopic structure and function with organ and cat dissection. Three lecture hours, two lab hours. (800:240) (3, 2)

BIO 168 Human Anatomy and Physiology I w/lab 
Prerequisites: BIO 105 Introductory Biology or BIO 112 General Biology I or one year of high school biology within the past five years, and CHM 112 Introduction to Chemistry or one year of high school chemistry within the past five years. This course is a study of the structure and function of the human body with combined lecture and laboratory. This is the first semester of a two-semester course. Major topics addressed include levels of organization, basic chemistry and metabolism, cytology and histology. The systems covered include the integumentary, skeletal, muscular, nervous, and endocrine, along with brief associated pathology of each system. Laboratory includes study of both gross and microscopic structure and function with organ and cat dissection included. Three lecture hours, two lab hours. (3, 2)

BIO 173 Human Anatomy and Physiology II w/lab 
Prerequisite: BIO 168 Human Anatomy and Physiology I w/lab. This course is a study of the structure and function of the human body with combined lecture and laboratory. This is the second semester of a two-semester course. Major topics addressed include blood and cardiovascular system, lymphatic system, respiratory system, digestive system, urinary system, and the reproductive system, along with brief associated pathology of each system. Laboratory includes study of both gross and microscopic structure and function with organ and cat dissection included. Three lecture hours, two lab hours. (3, 2)

BIO 186 Microbiology (w/lab) 
Prerequisites: One year of high school chemistry or CHM 112 Introduction to Chemistry and BIO 112 General Biology I or equivalent or instructor approval. Students study cytology, metabolism, and diversity of microscopic organisms. Pathogens, etiology, and basic immunology are emphasized. Laboratory includes isolation, cultivation and control of selected bacteria, fungi, and others. Three lecture hours, two lab hours. (800:260) (3, 2)

BIO 216 HIV/AIDS Seminar 
This course will focus on the social implications of AIDS, the origins, the structure and life cycle of the HIV virus, how it is diagnosed and treated and possible preventative measures so that we may ease the suffering of a disease that plagues our world today. The biological concepts may include cells, pathology, evolution, DNA, genetics, biotechnology, ethics, and ecology. (1, 0)

BIO 928 Independent Study 
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (800:299)

BIO 949 Special Topics 
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. (1-3)

Business 

BUS 102 Introduction to Business 
The functions and practices of modern business and the economic institutions that facilitate the operation of individual business units. The interrelations existing in the various phases of business activity: organization, finance, production, and marketing. (320:110) (3, 0)

BUS 110 Business Math and Calculators 
A study of the mathematics of business in its application to a variety of vocations including fundamental mathematical processes, fractions, price and cost, interest, bank discounts, cash and trade discounts, depreciation, payroll and taxes, and financial statements. Students will acquire the skills to use Microsoft Excel and traditional methods to perform each concept. (320:115) (3, 0)

BUS 121 Business Communications (Business) 
Prerequisite: ENG 101 Elements of Writing or minimum ACCUPLACER sentence structure score of 86. This course is a study of communications for the typical business situation. Topics to be covered are reports and letters of inquiry, orders, credit, collections, sales, and handling disputes. (320:200) (3, 0)

BUS 130 Introduction to Entrepreneurship 
This course examines the preparations and methods needed to start a business, including business plan preparation, the management functions needed to keep it operating on a sound basis, financial analysis system, management, sales promotion, purchasing, pricing, human resources management, credit, insurance, inventory control, regulations, and taxes. (320:123) (3, 0)

BUS 150 E-commerce 
Internet marketing is designed to improve students' understanding of market principles and their application to the emerging electronic commerce (E-commerce) industry. Students will demonstrate knowledge in Web page formatting, incorporating the needed elements to make business Web pages usable and successful. This class will deal with the business applications and implications of beginning E-commerce study. (Note that this is not a fundamentals of Web programming or computer programming class.) (320:243) (3, 0)

BUS 161 Human Relations 
Human Relations is a course designed to improve students' ability to function in the workplace. This course will work on increasing students' self-awareness and improving their ability to get along with customers, coworkers, and supervisors. The course will build communications and human relations skills. (320:100) (3, 0)

BUS 165 Introduction to Leadership 
Overview of leadership theory and skills for effective leadership; historical perspective, development of a personal philosophy of leadership, self-assessments, leadership models; study of groups, culture, and communities; and apply what is learned in experiential learning settings; geared toward emerging student leaders and working professionals. (3, 0)
BUS 166  
**Applied Leadership**  
Prerequisite: BUS 165 Introduction to Leadership or instructor approval. This course is designed to aid students in developing their leadership style. Students will complete self-assessments, group work, reflection logs, and apply their learnings/findings to various leadership activities inside and outside the classroom. This course is geared toward emerging student leaders and working professionals. (3, 0)

BUS 185  
**Business Law I**  
After an introduction to the legal system and an overview of the Constitution, torts and criminal law, the course focuses on one of the most significant bodies of law—contracts. The area of contract law will expose the student to the rules developed by our society which allow promises to be binding and enforceable, rules which allow promises to be broken, and rules which govern the remedies. (320:240) (3, 0)

BUS 186  
**Business Law II**  
The course begins with a study of Article Two of the Uniform Commercial Code, which deals with sales and leases of commercial goods. After covering the major issues of Article Nine (Negotiable Instruments and Secured Transactions), the course turns next to reviewing the various types of business relationships and associations, including partnerships, limited partnerships, and corporations. The remainder of the course is spent studying issues associated with property law—both personal property and real property. The course closes with a review of insurance topics. (320:241) (3, 0)

BUS 230  
**Quantitative Methods for Business Decision Making**  
Prerequisite: MAT 101 Intermediate Algebra or instructor approval. A study of the quantitative methods commonly used in business and related areas. The course includes a basic algebra and probability review, decision theory, models, linear programming, forecasting, and inventory control. (320:236) (3, 0)

BUS 238  
**Business Problem Solving**  
A capstone course for those students in business and information technology programs. The course will apply knowledge learned in business curriculum including accounting, management, marketing, information technology, E-commerce and office systems through the development of business strategy and implementation. Topics to be covered include development of a mission statement, value creation, SWOT analysis and strategy implementation and assessment. Students will share knowledge learned across their individual disciplines to perform case analysis, promoting critical thinking skills, teamwork and a cross-functional business environment. (This course should be taken in the final semester of a student's program.) (320:270) (3, 0)

BUS 928  
**Independent Study**  
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (320:299)

BUS 932  
**Internship**  
The business and information technology department offers cooperative programs in which students may gain practical experience. When students reach a predetermined level of proficiency, they are placed at a training site. Students must complete 64 hours of training for every credit in which they are enrolled. (320:262) (0, 0, 0, 16)

BUS 949  
**Special Topics**  
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. (3, 0)

**Computer Aided Drafting**

CAD 113  
**AutoCAD I**  
The student will become familiar with two-dimensional capabilities of AutoCAD. The student will learn to be proficient, work with blocks, attributes, libraries, and set up template drawings. (220:172) (2, 2)

**Chemistry**

CHM 110  
**Introduction to Chemistry**  
Designed for the student with no high school chemistry background. A study of chemistry in our lives and chemical principles. It teaches the student to identify and calculate mathematical measurements in health science, list components of an atom, compounds, and chemical equations. Emphasis also placed on concentration of solutions—especially acids and bases. (3, 0)

CHM 112  
**Introduction to Chemistry (w/lab)**  
This course is an introduction to the principles and theories of general chemistry. Topics of study include: matter, chemical reactions, atomic structure, chemical bonding, solutions, acids, bases, and organic compounds. This course is intended for students desiring a basic background in general chemistry and those majoring in an allied health field. Three lecture hours, two lab hours. (3, 2)

CHM 122  
**Introduction to General Chemistry**  
An elementary approach to chemical principles and laboratory practices. Emphasizes the nature of matter, bonding, nomenclature, equations, acids and bases and chemistry as applied to everyday life. (3, 2)

CHM 132  
**Introduction to Organic and Biochemistry**  
Prerequisite: CHM 122 Introduction to General Chemistry or CHM 166 General Chemistry I (w/lab) or permission of instructor. The course focuses on the study of aliphatic and aromatic compounds, their chemistry and uses in consumer products such as polymers and aromatic compounds, and energy changes in chemical reactions. Emphasis is given to biologically important compounds: proteins, nucleic acids, carbohydrates and lipids and the chemistry of these molecules in the living organism. (3, 2)

CHM 151  
**College Chemistry I**  
This course introduces the student to general, organic and biological chemistry. Topics covered are chemical calculations, atomic structure, nuclear chemistry, periodic relations, gas laws, solid state, solutions, and acids and bases. (3, 2)

CHM 166  
**General Chemistry I (w/lab)**  
This course is the first five credits of a 10-credit sequence in general chemistry. The broad topics of discussion are: gases, liquids and solids, atoms and molecules, nomenclature and chemical arithmetic, atomic structure, properties of elements, chemical bonding, and energy changes in chemical reactions. Laboratory work is designed to supplement and support lecture and discussion topics. Four lecture hours, two lab hours. (820:190) (4, 2)

CHM 176  
**General Chemistry II (w/lab)**  
Prerequisite: CHM 166 General Chemistry I. This course is an extension of CHM 166 General
Chemistry I. The general topics of discussion are: solutions, oxidation-reduction, chemical equilibriu, acids and bases, ionic equilibrium, electrochemistry, chemical kinetics, nuclear chemistry, carbon compounds, and polymers and proteins. Laboratory work is designed to supplement and support lecture and discussion topics. Four lecture hours, two lab hours. (820:191) (4, 2)

CHM 261
Organic Chemistry I (w/lab)
Prerequisite: CHM 176 General Chemistry II. This course is the first four credits of an eight-credit sequence in organic chemistry. The broad topics of discussion are: nomenclature, synthesis, structure and bonding, reaction mechanisms, and physical properties. An emphasis is placed on alkanes, alkenes, alkyl halides, aromatics, and alcohols. Laboratory work is designed to supplement and support lecture and discussion topics. Three lecture hours, three lab hours. (820:290) (3, 3)

CHM 271
Organic Chemistry II (w/lab)
Prerequisite: CHM 261 Organic Chemistry I. This course is the last four credits of an eight-credit sequence in organic chemistry. The broad topics of discussion are: nomenclature, synthesis, structure and bonding, reaction mechanisms, and physical properties. An emphasis is placed on spectroscopic techniques to determine structural arrangement, carbonyl compounds, benzene and its derivatives, alcohols, and ethers. Laboratory work is designed to supplement and support lecture and discussion topics. Three lecture hours, three lab hours. (820:291) (3, 3)

CHM 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (820:299)

CHM 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Cancer Information Management

CJM 205
Cancer Pathophysiology
Cancer Pathophysiology is a focused study of the major histological cell types in which cancer arises. Students will learn to differentiate between a new primary cancer and a recurrence of previous primary in cancer cases utilizing the Surveillance on Epidemiology and End Results (SEER) Program guidelines on Multiple Primaries/Histologies. Students will study advanced terminologies used by pathologists on gross and microscopic pathology reports. Students will study cancer epidemiology, diagnostic work up, and current therapies. (3, 0)

Computer Programming

CIS 121
Introduction to Programming Logic
This course will provide a basic understanding of problem-solving concepts. The course explains the logic behind storing and moving data and the programming logic required to meet the needs and parameters of end users and the systems they utilize. (360:155) (3, 0)

CIS 152
Data Structures
Prerequisite: CIS 171 Java. This course will cover the development and implementation of algorithms involving arrays, stacks, queues, linked lists, sorts, and files. The structures will be incorporated into window frames and html applets in many instances. The course will also include discussions of other Java elements, such as interfaces, containers, and polymorphism. (360:226) (3, 0)

CIS 161
C++
Prerequisite: Experience in a programming language. An introduction to C++. The course will include files, arithmetic and logical operations, control structures, functions and parameter passing, arrays, a preface to using objects, and incorporation of the older C include files into C++ programs. (360:230) (3, 0)

CIS 171
Java
Prerequisite: Programming in BASIC or another computer language. An introduction to structured programming using Java. Topics will include variables, data types, mathematical expressions, input and output, standard functions, user-defined functions, classes, control structures, iteration, file streams, aspects of objects, and Windows API interface. (360:200) (3, 0)

CIS 215
Server Side Web Programming
Prerequisites: CIS 604 Visual Basic, CIS 171 Java, and some experience in coding HTML. An introduction to the theory and implementation of interactive Web programming. The course will begin with Java script and HTML input forms and move on to interfacing them with simple programs in Perl CGI, ASP, and JSP. The remainder of the semester will focus on PHP and MySQL. (360:247) (3, 0)

CIS 230
Web Infrastructure
Prerequisite: A business, networking, or MIS major or programming experience. A three-part introduction to computer programming technology. The first section, literacy, deals with history of hardware, software, multi-user technologies, and programming. The second section will be an introduction to networking. Topics will include installation of server software and hardware, protocols, user accounts, privileges, data sharing, and networked programs. The third section will cover Web-hosting topics. Students will register a domain name, lease a Web host, and set up pseudo business Web sites on a remote host. (360:112) (3, 0)

CIS 339
Advanced Data Base and SQL
Prerequisites: BCA 167 Comprehensive Databases and CIS 121 Introduction to Programming Logic. Students will be trained to install, configure, upgrade, troubleshoot, and repair Structured Query Language (SQL) databases for use in today's data-intensive work environments. Database systems are the key component to any network infrastructure. They are the sole reason networks came into popularity and the complexity of a database continues to grow. The database industry is the foundation for the exchange of data and management of information. (3, 0)

CIS 604
Visual Basic
Prerequisite: CIS 121 Introduction to Programming Logic. An introduction to
structured programming using Microsoft Visual Basic. Topics will include Windows API objects, variables, data types, mathematical expressions, input and output, standard functions, user-defined functions, control structures, iteration, arrays, and simple sorts. (360:146)(3, 0)

CIS 606 Visual BASIC .NET I
This course introduces Windows programming using Microsoft’s .NET framework. Students will write introductory level programs involving variables, assignment, input and output using graphical user interface (GUI), calculations, repetition and selection between alternatives using the .NET environment. (3, 0)

CIS 612 Advanced Visual Basic
Prerequisite: CIS 606 Visual Basic or instructor approval. An intermediate course in Visual BASIC programming. Students will design, write, and debug Visual Basic programs using structured programming concepts. Program concepts covered will include animation and graphics, control arrays, database management, classes and objects, multiple forms, modules, and Active-X. (360:147)(3, 0)

CIS 650 PC Operating Systems
A course in resource and file management on small computer systems. The course will survey techniques used to manage secondary storage. The students will also learn the nuances of installing and managing resources and users in a PC environment. An in-depth study will be made of drivers, controllers, and external and internal operating systems commands. Rudimentary introductions to the registry, batch programming, and systems programming with other languages will also be included. (360:250)(3, 0)

CIS 750 Project Management
Prerequisites: CIS 755 Management Information Systems and BCA 152 Comprehensive Spreadsheets or BCA 167 Comprehensive Databases or instructor approval. This course is designed to provide students exposure to project management and its importance to improving success in information technology projects. Topics addressed in the course will include triple constraints of project management, project life cycle, cost estimates, value management and motivation theory, and team building. Tools and techniques important to project management will also be presented, including project selection methods, work breakdowns, network diagrams, critical path analysis, and scheduling. Students will have the opportunity to utilize software to help plan and manage an information technology project. (360:252)(3, 0)

CIS 755 Management Information Systems
Prerequisite: BCA 152 Comprehensive Spreadsheets or instructor approval. This course will acquaint the student with the variety of topics and issues related to business systems, information, and computers. The objective of this course is to provide a base of knowledge and to acquaint students with the literature available and other sources for continuing their learning in the information technology field. Students would also practice software skills in solving business and technology integrated problems. (360:251)(3, 0)

CIS 928 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (360:299)

CIS 949 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Cultural Studies

CLS 150 Latin American History and Culture
This course will provide the student with a basic understanding of Latin American history and culture. This course is designed to analyze the history of the people, cultures, and institutions of the 33 countries in the continents of North and South America. This course will cover Latin American history from the discovery of America through the wars of Independence to the present, including colonial institutions, and major social, political, and economic developments. The national development and the social and political problems of Argentina, Brazil, Chile, Cuba, and Mexico will have special emphasis. (520:114)(3, 0)

Communication

COM 724 Employment Communications
This course is designed to refine business writing and reading techniques and focuses on what is expected from today’s business personnel. This course is designed to aid the student in developing the skills and materials necessary to obtain employment and to emphasize the development of characteristics associated with job success. Due to the nature of this class, students should take this course in their final semester or at least no earlier than two semesters before they graduate. (3, 0)

COM 928 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (400:299)

COM 949 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Construction

CON 115 Commercial Print Reading
This course will cover reading and interpreting construction drawings and specifications of residential and light commercial buildings. Emphasis will be placed on the architectural, mechanical, and site aspects of working drawings. Additional topics include plan and elevation views, symbols and notations, scaling and dimensional practices, structural information, detail drawings, plot plans, and reading drawings for trade information. (3, 0)

CON 141 Basic Construction Skills
This course provides students with the basics in construction including math, safety, blueprint reading, hand and power tools, employability skills, and materials handling. (130:106)(2, 0)

CON 155 Carpentry Level I
This course will provide a fundamental overview of the carpentry trade. Students will gain a basic knowledge of construction materials,
CON 159  Carpentry Level IV
In this course students are exposed to site layout and preparation, commercial finish work, and advanced stair construction. (130:203)(5, 0)

CON 183  Construction Lab IA
This course provides students a hands-on application in the basics in construction including math, safety, blueprint reading, hand and power tools, employability skills, and materials handling. (130:122)(0, 10)

CON 184  Construction Lab IB
This course provides hands-on experience in the construction of a residential home. Students will demonstrate basic knowledge of construction materials, hand and power tools, rough framing, plan reading, window and exterior door installation, and basic concrete practices. (130:123)(0, 10)

CON 187  Construction Lab III
This course provides hands-on experience in the construction of a residential home as well as the construction of commercial building assemblies within a laboratory setting. Specific topics include rigging, firewall assemblies, and built-up roofs. Students will employ introductory skills in project supervising. (130:142)(0, 20)

CON 188  Construction Lab IIA
This course provides hands-on experience in the construction of a residential home. Students will apply knowledge and skills in roofing applications, thermal and moisture protection, exterior finishing, and cold-formed steel framing. (130:132)(0, 10)

CON 189  Construction Lab IIB
This course provides hands-on experience in the construction of a residential home. The intent of this course is to provide students with the knowledge to install and finish drywall, install doors and windows, install suspended ceilings, and install cabinets. (130:133)(0, 10)

CON 191  Construction Lab IV
This course provides hands-on experience in the construction of a residential home. Students will form and pour concrete footings and foundations. Students will perform site preparations in the application of concrete forms. (0, 20)

CON 237  Carpentry Level IIA
Carpentry Level IIA is designed to provide the students with knowledge, information, and skills in preparation to handle the work requirements in the construction trades. The intent of this course is to provide students with knowledge and skills in roofing applications, thermal and moisture protection, exterior finishing, and cold-formed steel framing. (3, 0)

CON 267  Carpentry Level IIB
Carpentry Level IIB is designed to provide the students with knowledge and information in preparation to handle the work requirements in the construction trades. The intent of this course is to provide students with the knowledge in drywall installation and finishing, installation of doors and windows, the installation of suspended ceilings, as well as the installation of cabinets. (2, 0)

CON 377  Carpentry Level III
This course will provide instruction in advanced commercial construction systems as well as introductory skills in project supervising. Specific topics include rigging, firewall assemblies, and built-up roofs. (130:201)(5, 0)

CON 425  Internship
While enrolled in this course, the student will secure a job and perform carpenter duties for regular pay. This applies toward the on-the-job training which is required for attaining journeyman status. (130:202)(0, 0, 16)

CRJ 100  Introduction to Criminal Justice
This course will offer an introduction to the varying and ever evolving fields in criminal justice with primary emphasis on the three main areas of the criminal justice system: police, courts, and corrections. The student will gain a realistic understanding of the various fields and career opportunities in criminal justice while learning of the interactions and complexities of each area. Further, this course will challenge students to think critically about the concept of justice. (3, 0)

CRJ 111  Police and Society
Pre-requisite: CRJ 100 Introduction to Criminal Justice. In this course, students will examine police as an instrument of society's order maintenance and control. This course utilizes a multiple causation model to explain police issues, integrating six core elements: history, role, socialization, culture, function, and experience. Students study police history, police role and organization, the making of a police officer, police behavior, stress, the delivery of effective police services, and the future of law enforcement. (3, 0)

CRJ 130  Criminal Law
This course will review the development of criminal law, the mechanism used by civilized society to regulate behaviors. The course is broken into four (4) basic areas: the fundamentals of criminal law (history, organization, constitution, and common law); statutory crimes (crimes against persons and property, crimes against society, and victimless crimes) and defenses; the mechanics of criminal prosecution (search and seizure, arrest, interrogation, pretrial process, and trial); and disposition and post-trial matters (sentencing, punishment, rehabilitation, and appeals). (3, 0)

CRJ 132  Constitutional Law
This course will be a study of the application of constitutional principles to social and political questions including the powers of the national government versus state government through focus on the incorporation issue and examination of the evolution of civil liberties guarantees. (3, 0)

CRJ 170  Overview of Cybercrime
Students in this course will explore the use of current technology in the commission of criminal acts and the police response through investigation and trial preparation. (3, 0)

CRJ 200  Criminology
Prerequisite: CRJ 100 Introduction to Criminal Justice or SOC 110 Introduction to Sociology. This course is an introductory course in the field of criminology. The course examines topics including history, nature, and theories of crime causation, crime typologies, the criminal justice system, and issues related to current crime trends in America. The criminal behavior patterns include violent crimes, property crimes, white-collar crimes, cybercrimes, organized crimes, and public order crimes. (620:240)(3, 0)

CRJ 201  Juvenile Delinquency
Prerequisites: SOC 110 Introduction to Sociology and CRJ 100 Introduction to Criminal Justice. The student will analyze the various components of delinquency in children, adolescents, and
young adults. The development and operation of juvenile courts will be covered and the theories and methods of juvenile treatment and rehabilitation will be examined. (3, 0)

CRJ 207  Drug Use and Abuse
This course is designed to help the student understand sociological aspects of drug use, abuse, and treatment. (3, 0)

CRJ 928  Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required.

CRJ 949  Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Auto Collision Repair/Refinish

CRR 101  Sheet Metal Welding
This sheet metal welding course is designed to give the student the necessary theory and hands-on training to perform competent quality cutting and welding repairs to automotive equipment in the auto collision industry. The knowledge gained from lectures as well as lab experience from operating oxyacetylene cutting and welding torches, plasma cutters and gas metal arc welders (commonly called MIG welding) will help them in making the correct repair to a customer’s vehicle following manufacturer’s procedures. (110:100) (1, 2)

CRR 116  Advanced Welding Techniques
Prerequisite: CRR 101 Sheet Metal Welding. This course is a continuation of gas metal arc welding, also called MIG welding, with advanced applications including welding aluminum with a spool gun and a push-pull feeder with a pulse welder. Gas tungsten arc welding, also called TIG welding, and additional plasma cutting will be covered. Working with various metals such as advanced metals, aluminum, galvanized metal, along with squeeze type resistance spot welding (STRSW), weld bonding, and MIG brazing will also be included. (110:230) (1, 2)

CRR 201  Plastic Repair
Students will receive instruction on thermosets and thermoplastics, repair decisions, plastic welding, and adhesive repair technology. SMC repair will also be covered. (110:171) (1, 2)

CRR 301  Introduction to Collision Repair
Safety, worker protection, ASE, I-CAR, careers and fundamentals of collision repair are covered. Tools and equipment, shop designs, and the interpretation of MSDS will be studied. (110:111) (1, 0)

CRR 324  Sheet Metal Fundamentals
Metalworking skills are taught as the foundation of properly repairing damaged metal panels, followed by an understanding of body fillers and shaping techniques. Damage theory is covered in addition to damage analysis and types of steel used in automotive construction. Aluminum cosmetic panel straightening will also be taught. (110:121) (1, 6)

CRR 361  Collision Lab I
Actual shop setting where project vehicles are worked on based off of actual estimates. The objective of the lab is to fine tune previously taught skills and to sequence a repair plan while improving speed and work efficiency on a production basis. Each new lab is designed to introduce tougher projects and develop the student/technician’s independence while increasing the flat rate hours turned in a clocked period. (110:188) (2, 4)

CRR 362  Collision Lab II
Prerequisite: CRR 361 Collision Lab I. Actual shop setting where project vehicles are worked on based off of actual estimates. The objective of the lab is to fine tune previously taught skills and to sequence a repair plan while improving speed and work efficiency on a production basis. Each new lab is designed to introduce tougher projects and develop the student/technician’s independence while increasing the flat rate hours turned in a clocked period. (110:200) (1, 2)

CRR 363  Collision Lab III
Prerequisite: CRR 362 Collision Lab II. Actual shop setting where project vehicles are worked on based off of actual estimates. The objective of the lab is to fine tune previously taught skills and to sequence a repair plan while improving speed and work efficiency on a production basis. Each new lab is designed to introduce tougher projects and develop the student/technician’s independence while increasing the flat rate hours turned in a clocked period. (110:220) (0, 4)

CRR 364  Collision Lab IV
Prerequisite: CRR 363 Collision Lab III. Actual shop setting where project vehicles are worked on based off of actual estimates. The objective of the lab is to fine tune previously taught skills and to sequence a repair plan while improving speed and work efficiency on a production basis. Each new lab is designed to introduce tougher projects and develop the student/technician’s independence while increasing the flat rate hours turned in a clocked period. (110:225) (0, 4)

CRR 420  Non-Structural Repair
Techniques in cosmetic panel replacement and alignment are discovered of both bolt-on and weld-on types. Door hardware, moveable glass, exterior and interior trim replacement and repairs round out this offering. Adhesive bonding and aluminum panel replacement procedures are also covered. (110:134) (2, 4)

CRR 504  Frame and Unibody Damage Analysis
Advanced collision theory coupled with fundamentals of measuring full frame and unibody constructed vehicles with centerline gauges. Safety and the various types of pulling and measuring equipment will be covered. Structural integrity via stationary glass is also covered with replacement procedures. Corrosion protection is also studied. (2, 4)

CRR 508  Structural Parts Replacement
Prerequisite: CRR 504 Frame and Unibody Damage Analysis. This course will include steel structural parts replacement and sectioning on full frame and unibodies. New and used parts will be covered. (1, 4)

CRR 572  Advanced Structural Repair
Prerequisite: CRR 508 Structural Parts Replacement. Alternative methods of diagnosing frames and unibody damage with UMS and laser/computerized measuring systems. The characteristics of aluminum structural parts will be discussed. Structural straightening aluminum and structural parts aluminum damage diagnosis and replacement will also be covered. (110:200) (1, 2)

CRR 743  Estimating
Students are taught to record physical damage on a vehicle. Mitchell software is introduced.
Knowledge of mechanical and body parts, nomenclature, flat rates, insurance procedures, and industry definitions are covered. Emphasis on refinish formulas, overlap, headnotes, footnotes, and application of procedure pages. (3, 0)

CRR 760
Advanced Estimating
Prerequisite: CRR 743 Estimating. Students will further develop computerized estimating skills with Mitchell software. Topics will include: customer relations, claims processing, judgment and flat rate decisions, alternative parts use, restoration estimating, and estimating damage from hail, deer, and other unique situations. Cycle Time Reduction will also be studied. (110:210) (2, 0)

CRR 804
Introduction to Refinishing
Fundamentals are stressed in this introduction to painting. Surface preparation, safety, composition of paints, undercoats, application techniques, and equipment are covered in great detail. Masking skills, single stage and basecoat/clearcoat applications are practiced acquainting the student in refinishing. (110:148) (2, 4)

CRR 833
Refinishing II
Prerequisite: CRR 804 Introduction to Refinishing. A further study in refinishing operations including finish defects, application problems, and non-painting repairs including detailing. Basecoat/clearcoats, tri-coats, and multi-stage finishes are covered in greater detail. Tinting, blending, and color theory will also be covered. (110:146) (1, 4)

CRR 835
Refinishing III
Prerequisite: CRR 833 Refinishing II. This course explores the recent advances of the "Green" movement affecting the collision repair refinishing industry. From waterborne technology to recent federal legislation empowering the Environmental Protection Agency to regulate body shop emissions as well as Iowa DNR requirements. (1, 2)

Computer Science
CSC 107
Computer Literacy
This non-transfer course is designed to assist students who have limited experience with a personal computer. Skills emphasized will include file management, Internet navigation, e-mail, and entry-level functions of Microsoft Word, Excel, and PowerPoint. Students may use this course to prepare for CSC 110 Introduction to Computers. (3, 0)

CSC 110
Introduction to Computers
Prerequisite: Keyboarding skills. This is an introductory course that surveys a variety of topics including history, hardware, software, terminology, communications, computer ethics, and societal impact of computers. In addition to computer literacy, students will complete hands-on modules for Microsoft Office programs. (360:110) (3, 0)

CSC 135
Digital Communications
Prerequisite: CSC 110 Introduction to Computers or instructor approval. The study of varied digital input technologies and business procedures including the selection and use of tablet and handheld computers, scanning, speech recognition, and digital communication devices. (3, 0)

CSC 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (360:299)

CSC 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. (1-3)

Film and Theatre
DRA 101
Introduction to Theatre
This course is a survey of the elements of theatre. The course covers units on audience/performer relationships, dramatic forms, dramatic literature, history of the theatre, dramatic theory and criticism, and technical theatre. (3, 0)

DRA 110
Introduction to Film
This course is designed to introduce students to the history, evolution, philosophic, artistic and economic aspects of motion pictures and the filmmaking industry. Students will have the opportunity to examine the various genres of the movie industry: drama, film noir, western, fantasy, documentary, romantic comedy, horror, musicals, silent films, etc. Utilizing film excerpts and entire movies as tools, students will hone skills in film analysis, beginning with recognition. (3, 0)

Disability Services
DSV 160
Counseling Skills
This is an introductory course in applied counseling techniques. Students are introduced to a variety of facilitative skills and counseling concepts and work through the interviewing process in simulated helping services settings. (4, 0)

Early Childhood Education
ECE 103
Introduction to Early Childhood Education
Gives students a historical and philosophical foundation of the field of early childhood education. Includes an overview of assessment and trends that influence best practices. Explores careers in the field. Addresses influences of families and diversity. (3, 0)

ECE 106
Child Development Associate Standards
Prerequisites: Should have completed at least three of the four defined CDA courses with a 2.5 GPA or higher: ECE 133 Child Health, Safety and Nutrition, ECE 103 Introduction to Early Childhood Education, ECE 243 Early Childhood Guidance. CDA candidates may choose one of the following: ECE 158 Early Childhood Curriculum I, ECE 159 Early Childhood Curriculum II, or ECE 221 Infant/Toddler Care and Education. Must obtain an eligible CDA advisor, verify ability to meet CDA credential eligibility and obtain/maintain a current First Aid, CPR, and Mandatory Reporting certification by the last week of this course. Co-requisite: One of the four required classes may be taken during the same semester. This course assists the eligible CDA credential candidate with developing and preparing for the Preschool, Infant-Toddler, or Family Childcare CDA validation visit and assessment. Students will develop a resource binder and prepare for the written assessment and oral exam and for the final observation. General topics for discussion include: planning a safe and healthy learning environment; steps to advance children's physical and intellectual development; positive ways to support children's development; positive ways to support children's development.
social and emotional development; strategies to establish productive relationships with families and effective program operation; maintaining a commitment to professionalism; observing and recording children's behavior; and principles of child growth and development. (0, 2)

ECE 133  
Child Health, Safety and Nutrition
Focuses on current concepts in the field of health, safety and nutrition and their relationship to the growth and development of the young child ages birth to eight. Blends current theory with practical applications and assessments. Includes the influences of families and diversity on health, safety and nutrition in early childhood settings. (3, 0)

ECE 158  
Early Childhood Curriculum I
Focuses on the development, implementation, and assessment of appropriate environments and curricula for young children ages three through eight. Students prepare to utilize developmentally appropriate practices in a context of family and culturally sensitive care. Emphasis is on understanding children's developmental stages and developing appropriate learning opportunities, interactions and environments in the following areas: dramatic play, art, music, fine and gross motor play. (3, 0)

ECE 159  
Early Childhood Curriculum II
Focuses on the development, implementation and assessment of appropriate environments and curricula for young children ages three through eight. Students prepare to utilize developmentally appropriate practices in a context of family and culturally sensitive care. Emphasis is on understanding children's developmental stages and developing appropriate learning opportunities, interactions and environments in the following areas: emergent literacy, math, science, technology, and social studies. (3, 0)

ECE 170  
Child Growth and Development
Reviews typical and atypical development of children from conception to adolescence in all developmental domains. Presents interactions between child, family, and society within a variety of community and cultural contexts. Examines theories associated with our understanding of children. (3, 0)

ECE 221  
Infant/Toddler Care and Education
Focuses on care, education, and assessment of children from birth to thirty-six months. Prepares students to utilize developmentally appropriate practices including responsive caregiving, routines as curriculum, importance of relationships with diverse families, and a focus on the whole child in inclusive settings. (3, 0)

ECE 243  
Early Childhood Guidance
Focuses on the effective approaches and positive guidance strategies for supporting the development of all children. Emphasizes supportive interactions and developmentally appropriate environments. Uses assessment to analyze and guide behaviors. Studies impact of families and diversity on child guidance. (3, 0)

ECE 262  
Early Childhood Field Experience
Pre- and co-requisites: ECE 158 Early Childhood Curriculum I, ECE 159 Early Childhood Curriculum II, ECE 170 Child Growth and Development, ECE 221 Infant/Toddler Care and Education, ECE 243 Early Childhood Guidance
2.0 grade point average overall and 2.5 grade point average in Early Childhood courses. Should have taken or be taking pre- and co-requisites during semester of the field experience. Student must hold a current Pediatric First Aid/ CPR certification and have taken Mandatory Reporter training.
Supervised experience* in selected early childhood settings serving children ages birth through eight. This course includes integration of theory and developmentally appropriate evidence-based practice. It also provides an understanding of working with culturally, linguistically, and ability-diverse young children and families and emphasizes professional relationships and behavior, appropriate adult/child interactions, basic curriculum planning, and program routines.
*Requires a minimum of 100 hours for two credits of direct work with children, with the remaining contact hours equal to one credit of face-to-face seminar. (1, 0, 0, 8)

ECE 287  
Exceptional Learner
An introductory course designed to provide the student with an overview of the field of special education and the policies and programs established for the education of exceptional students. It includes an analysis of the nature, incidence and characteristics of the students with physical and mental handicaps, the behavior disordered, the talented and gifted and the learning disabled. This course is required for teacher certification in Iowa and Illinois. (3, 0)

ECN 110  
Introduction to Economics
This course is a presentation of the basic economic problem of scarcity. It is a survey of micro-economics dealing with market behavior and macro-economics dealing with government stabilization policies in the U.S., including international trade. This course is not recommended for students who anticipate a bachelor's degree requiring a two-term sequence in economics. (3, 0)

ECN 115  
Personal Finance
This course is a discussion and study of consumer problems, practical information for solving financial problems, and suggestions for the improvement of methods for planning and spending of incomes. Includes budgeting, money management, consumer credit, insurance, saving and investments, home ownership, and estate planning. (340:220)(3, 0)

ECN 120  
Principles of Macroeconomics
A study of supply and demand, price determination, macroeconomic equilibrium, the allocation of resources, national income and national product, aggregate demand and supply, inflation and unemployment, consumer behavior, and international trade. (340:220)(3, 0)

ECN 130  
Principles of Microeconomics
A study of supply and demand, individual consumer and firm behaviors, pricing and the market system, market structure, and the allocation of resources. (340:221)(3, 0)

ECN 928  
Independent Study
A student/instructor designed course intended for concentrated or advanced study.
ECN 949

Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Education

EDU 110 Exploring Teaching
This course is designed to provide guided observation and teacher-aide services in school classrooms. Emphasis is placed on the education theory taught in other teacher-training subjects. Local school systems provide a learning experience to the education/teaching student. Students qualifying for the program will be assigned to selected elementary and secondary schools for practical classroom experience. (3, 0)

EDU 120 Communication, Ethics, and Confidentiality
Participants will develop skills and strategies to enhance communication and examine situations where professionalism, ethical standards, and confidentiality will guide the correct course of action when working with colleagues, students, parents, and others. (640:130) (2, 0)

EDU 121 Behavior Improvement
Participants will gain knowledge, skills and strategies to assist, support and maintain the positive social, emotional, and behavioral development of children. (640:131) (2, 0)

EDU 122 Roles and Responsibilities
Participants will develop skills and strategies to support and maintain safe environments, educational activities, team interventions, and technology integration when working with colleagues, students, parents, and others. (640:132) (2, 0)

EDU 128 Behavior Management and Instructional Strategies
This course provides participants the opportunity to gain knowledge, skills and strategies to assist, support and maintain the positive social, emotional, and behavioral development of children. This course also focuses on developmental stages, technology integration, learning environments, and educational activities. (3, 0)

EDU 165 Early Childhood: Pre-kindergarten - Grade 3
This course provides participants the opportunity to gain knowledge, skills and strategies to assist, support and maintain the positive social, emotional, and behavioral development of children. This course also focuses on developmental stages, technology integration, learning environments, and educational activities. (3, 0)

EDU 210 Foundations of Education
This course is an introduction to professional education providing a historical and philosophical background from which the student can examine his or her own commitment to education. Challenges and issues in education today will be discussed in the context of school organization, funding, curriculum, professionalism, legal issues, and effective teacher characteristics. (3, 0)

EDU 235 Children's Literature
This course is a survey of the various types of literature available to children. It provides an introduction to authors and illustrators, as well as background material in the field of children's literature. (3, 0)

EDU 245 Exceptional Learner
This course provides an overview of special education regulations, policies and programs in educational settings. K-12 pre-service teachers learn the history of special education law, including IDEA and as it applies to NCLB, characteristics of the eight categories of disability per federal and state regulations, characteristics of talent and gifted programs, and basic component of an IEP. This course is a required component for students seeking K-12 teacher state licensure. (3, 0)

EDU 281 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (640:299) (1-3)

EDU 499 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. (3, 0)
### Electrical Technology

**ELE 110 Basic Electrical Fundamentals**
This course will provide a practical introduction to industrial electricity principles as applied to modern industrial, commercial, and institutional electric power systems. The topics covered include electrical flow, Ohm’s Law, electrical drawings, symbols and schematics, information on basic relay, breaker and fuse operation, as well as AC transformers and electric motors. (2, 2)

**ELE 116 Blueprint Reading**
This course will examine the basic layout of a set of construction drawings and identify the types of lines. Students will be trained to use an architect’s scale, interpret electrical drawings, interpret equipment schedules, and describe the type of information included in electrical specifications. (1, 0)

**ELE 155 National Electrical Code® I**
This course will focus on a review of the National Electrical Code®. The students will learn the layout of the NEC® and be able to navigate through it quickly. (2, 0)

**ELE 156 National Electrical Code® II**
Prerequisite: ELE 155 National Electrical Code® I. This course will focus on how to size and select circuit breakers and fuses for various applications. It also covers short-circuit calculations and troubleshooting. The course will examine the NEC® requirements for equipment installed in various hazardous locations. (2, 0)

**ELE 172 Fundamentals of Fluid Dynamics**
This course introduces hydraulic and pneumatic theory. Subject matter includes hydraulic, pneumatic, pressures, and power sources. (2, 2)

**ELE 174 Blueprint Reading II**
Prerequisite: ELE 116 Blueprint Reading. This is a training course for those who wish to learn the basic principles of commercial/industrial blueprint reading with a strong emphasis on electrical construction. This course develops an understanding of various rules and guidelines for the makeup of construction blueprints. The prints are then referred to, interpreted, and put into real world applications. (1, 0)

**ELE 177 DC Theory**
This course will focus on the inter-relationship between current, voltage, resistance, and power in a direct current electric circuit. Series, parallel, and combination circuits will be explored in depth using Ohm’s laws, Kirchoff’s laws and the power wheel. (3, 0)

**ELE 178 Introduction to Wiring**
This course will focus on the various career paths and/or opportunities in the electrical profession. The different sectors of the electrical industry will be discussed. The course will examine the variety of tasks typically performed by electricians as well as studying the responsibilities and aptitudes of those in the electrical profession. This course will examine the different types of nonmetallic and metallic device boxes available, how to determine the appropriate box for a given application and the appropriate method for mounting device boxes. Identifying and selecting various types and sizes of raceways and fittings will be discussed along with the different methods of installing raceways. Methods of bending and installing conduit will be examined. Finally, the course will examine the allowable ampacity of a conductor for a given application and installing conductors in a raceway system. (1, 8)

**ELE 179 Advanced Wiring Systems**
Prerequisite: ELE 178 Introduction to Wiring. The course will cover the process of conduit bending using electric and hydraulic benders and the types of bends. Identification, selection, and installation of pull and junction boxes will be discussed. Setting up and planning a cable pulling operation along with learning to install a pull line will be examined. The course will cover the components of a cable tray assembly and how cable enters and exits a cable tray. The preparation of cable ends for terminations and splices and connections using lugs or connectors will be covered. The operation of a circuit breaker and the necessity of overcurrent devices in electrical circuits is an essential part of this course. (1, 8)

**ELE 180 Electric Lighting Systems**
The course will focus on the characteristics of light, the various types of lamps and the advantages of each type (incandescent, halogen, fluorescent, and high intensity discharge). Selecting and installing lighting fixtures including recessed, surface-mounted, suspended and track-mounted will be discussed. Students will learn to recognize different types of ballasts and describe the operation of basic occupancy sensors, photoelectric sensors and timers. The course will examine the lighting terms lumen, candlepower, and foot-candle. Identifying lighting fixtures and the general lighting pattern produced by each type will be covered. Students will learn to identify the lighting requirements associated with lighting systems used in selected applications such as office buildings, schools, theaters, hazardous areas, etc. (2, 0)

**ELE 192 Principles of Motors/Transformers**
Prerequisite: ELE 195 Motor Control or instructor approval. This course is designed to introduce the student to the principles of AC and DC motors and their connection and application. Students will also learn about transformers, including single and three phase connection for various voltages and applications. (2, 2)

**ELE 195 Motor Control**
This course discusses motor controls, components, operation, and service. Students will learn electric relay control of AC and DC motors along with troubleshooting motors in an industrial application. (1, 4)

**ELE 197 Advanced Motor Control**
Prerequisite: ELE 195 Motor Control. This course is designed to familiarize the student with the circuits and components found in automated control systems. The use of solid state components and programmable controllers will be studied. (1, 4)

**ELE 201 AC Fundamentals**
Prerequisite: ELE 177 DC Theory or related high school or college DC Theory classes. In this course the students will learn to calculate the peak and effective voltage for AC waveforms as well as the phase relationship between two AC waveforms. The course will examine the voltage and current phase relationship in a resistive AC circuit and the voltage and current transients that occur in an inductive circuit. The course will examine the relationship between voltage and current in the following types of AC circuits: RL, RC, LC, and RLC circuits. Students will learn the functions of basic transformers. The course will focus on grounding and bonding the systems and the equipment related to such. (3, 0)

**ELE 207 Residential Electrical Services**
The course will focus on the grounding requirements of a residential electrical service, calculating and selecting service entrance equipment, and selecting the proper wiring methods for various types of residences. The course will also cover computing branch circuit
load requirements. The types and purposes of equipment grounding conductors and the purpose of ground fault circuit interrupters will be discussed. The course will examine the installation regulations for electrical systems around swimming pools, spas, and hot tubs as well as the rules for installing electric space heating and HVAC equipment. The operation of the following testing equipment will be covered: voltmeter, ohmmeter, clamp-on ammeter, multimeter, meg-ohmeter, motor and phase rotation testers. (1, 4)

ELE 208 Advanced Controls
Prerequisite: ELE 195 Motor Control. This course will cover the electrical characteristics of solid-state devices and various types of transistors. Motor and HVAC systems will be covered in depth. Class time will be devoted to the operation of heat tracing equipment and de-icing systems. (3, 4)

ELE 212 Industrial Electrical Systems
Prerequisite: ELE 179 Advanced Wiring Systems. This course provides an in-depth study of programmable logic controllers (PLCs) emphasizing the practical use of the PLC in process and industrial control systems. Applications, testing procedures, and operational aspects of PLC equipment and systems are discussed. This course covers the most common programmable logic controller functions, providing practical examples based on the widely used Allen-Bradley small logic controller (MicroLogix series of PLCs). Wiring and simple programming of a PLC are covered thoroughly. (1, 4)

ELE 213 Commercial Electrical Equipment and Services
Prerequisite: ELE 179 Advanced Wiring Systems. The course discusses switchboards and switchgear, including installation, grounding, and maintenance requirements. Transformer types, construction, connections, protection, and grounding will be covered. It will examine the components, installation considerations, and NEC® requirements for various commercial services. The course will cover the installation, termination and testing of various voice, data, and video cabling systems. The course will provide information on selecting, sizing, and installing motor controllers as well as control circuit pilot devices and basic relay logic. (1, 8)

ELE 214 Commercial Electrical Systems
Prerequisite: ELE 213 Commercial Electrical Equipment and Services. The class will focus on calculating loads and amperage for single phase and three phase feeders and calculating loads for various residential and commercial applications including health care facilities. The course will examine various emergency and standby systems. Installation of electrical systems in special locations such as theaters, marinas, carnivals, fairs, swimming pools, etc. will also be discussed. (1, 8)

ELE 223 Alternative Energy Systems
Prerequisite: ENV 154 Introduction to Renewable Energy. This course will provide detailed and accurate coverage of all aspects of alternative energy related to the design, operation, and overall analysis of such systems. The course will examine the applications of the induction generator in alternative sources of energy and covers the practical selection criteria for choosing induction generators versus other types of electrical machines. It will also convey new trends in design of wound rotor induction generators and discuss the latest economic and market trends related to induction generator-based renewable systems. (2, 0)

ELE 230 Calculations of Electrical Systems
Prerequisite: ELE 156 National Electrical Code® II or completion of Department of Labor registered apprenticeship program. This course will explain how to calculate branch circuit and feeder loads for various residential and commercial applications. It will cover the various factors involved in conductor selection, including insulation types, current-carrying capacity, temperature ratings, and voltage drop. The course will examine the calculations required to size conductors and overcurrent protection for motor applications. (3, 0)

ELE 932 Internship
This course provides students with opportunities to gain on-the-job experience in the electrical industry. Students will gain an understanding of qualities and skills needed for success in the electrical field. Coordination and guidance will be provided by the department instructor(s). To enroll in Internship, students must have successfully completed the first year electrical technology curriculum. (0, 0, 0, 16)

Electronics

ELT 160 Advanced Programmable Logic
Prerequisite: ELT 170 Introduction to PLCs or instructor approval. Advanced PLC programming builds upon the ladder logic programming learned in basic PLC. A range of peripheral equipment is integrated with the controller’s logic programming. (2, 6)

ELT 170 Introduction to PLCs
Prerequisite: ELE 110 Basic Electrical Fundamentals. This course explores the principles of control circuits in industrial equipment, how PLCs are programmed and troubleshooting. (2, 2)

ELT 717 Automated Processes and Robotics
Prerequisites: ELT 160 Advanced Programmable Logic and ELT 793 Advanced Fluid Power. Many of today’s industrial processes, assembly, and warehousing rely on automation and robotics. Even though this equipment may have reduced manual labor, the human touch is still necessary to make it all work. The course will provide students with the basic skills necessary to install, calibrate, troubleshoot, and repair sophisticated electromechanical devices including programmable logic and motor controls, relays and timers, and hydraulic and pneumatic components. (3, 4)

ELT 736 Instrumentation & Control
Prerequisites: ELT 170 Introduction to PLCs and ELT 192 Principles of Motors/Transformers. This course is designed to explore different types and usage of industrial measurement devices. Instrumentation symbols and terminology is also included. (1, 2)

ELT 793 Advanced Fluid Power
This is an advanced course that covers electronic controls and monitoring of fluid power systems, as well as troubleshooting fluid power systems. (2, 2)

English Composition

ENG 020 Fundamentals of Writing
This course provides the student with an opportunity to learn and practice basic writing skills. Topics include paragraph development, summary and reaction papers, and correct grammar usage. This course emphasizes paragraph development. Students may use this course to prepare for BUS 121 Business Communications (Business), ENG 101 Elements of Writing, COM 724 Employment Communications, ENG 105 Composition I, and other courses requiring writing skills. (090:134)(3, 0)
ENG 035
Writing Strategies
Writing Strategies is a developmental writing course designed to prepare students for success in college-level writing. Confidence and skill are built as students write and revise different types of paragraphs while learning to organize writing to support main ideas. A review of grammar, punctuation rules, and sentence structure is included in the course. (3, 0)

ENG 040
Communication Skills I
This individualized course is designed to help students improve their written communication skills by reviewing grammar, capitalization, punctuation, spelling, vocabulary, and basic composition and writing skills. (090:130)(1, 0)

ENG 041
Communication Skills II
Prerequisite: ENG 040 Communication Skills I. This is a continuation of ENG 040. This individualized course is designed to help students improve their written communication skills by reviewing grammar, capitalization, punctuation, spelling, vocabulary, and basic composition and writing skills. (090:131)(1, 0)

ENG 042
Communication Skills III
Prerequisite: ENG 041 Communication Skills II. This is a continuation of ENG 041. This individualized course is designed to help students improve their written communication skills by reviewing grammar, capitalization, punctuation, spelling, vocabulary, and basic composition and writing skills. (090:132)(1, 0)

ENG 043
Communication Skills IV
Prerequisite: ENG 042 Communication Skills III. This is a continuation of ENG 042. This individualized course is designed to help students improve their written communication skills by reviewing grammar, capitalization, punctuation, spelling, vocabulary, and basic composition and writing skills. (090:133)(1, 0)

ENG 101
Elements of Writing
This course is designed to develop students’ fluency in communication. Students will be provided additional writing practice in a workshop format beyond the foundations provided by high school or basic English courses. The course will feature intensive writing practice using practical scenarios likely to be encountered by students in academic or occupational writing situations. This practice will provide insights for students into the writing processes and assist them in developing competency in writing in Standard Formal English. (3, 0)

ENG 105
Composition I
This is an intensive writing course designed to develop skills in the use of language, clear thinking, critical reading, and effective writing within an essay format. Special emphasis will be placed on development of content, clear organization, sentence and paragraph structure, and correctness in usage, grammar, and mechanics. Research documentation is introduced. (400:110)(3, 0)

ENG 106
Composition II
Prerequisite: ENG 105 Composition I. This course is intended to build upon the skills students develop in ENG 105 Composition I. As such, the course assumes that students have a basic control of paragraphing, mechanics, grammar, and punctuation. The primary focus of the course shifts from the personal writing of ENG 105 Composition I to analytical, persuasive, and research writing. The course emphasizes critical thinking and clear, coherent development of thought. Using their research skills and the ability to organize the results of information gathering, students will be expected to analyze and present the results of their research in clear, organized, persuasive, and interesting writing projects. (400:111)(3, 0)

ENG 221
Creative Writing
Creative Writing is designed for those who enjoy writing and desire to learn how to structure and publish varied genres within fiction, nonfiction, and poetry. (400:215)(3, 0)

ENG 238
Creative Writing: Non-Fiction
Prerequisites: ENG 105 Composition I, ENG 221 Creative Writing, or instructor approval. A writing workshop for students’ nonfiction: personal essays, memoir, nature writing, literary journalism, or other subgenre of the craft. Class time devoted to reading and responding to classmates’ work, discussing published nonfiction and the writing craft. Homework devoted to drafting and revising and to reading and responding to published nonfiction in a variety of subgenres. (3, 0)

ENG 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (400:299)

ENG 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Environmental Science

ENV 102
Introduction to Sustainability
Due to the rising human population, the need for more sustainable practices has become essential for maintaining biodiversity, environmental health, and quality of human life. The principles of sustainability are discussed in the topics of energy usage, soil and water management, and food production, distribution, and safety. (3, 0)

ENV 111
Environmental Science (w/lab)
A study of biodiversity in ecosystems and associated environmental issues built around examination of current critical issues in climate change, water and soil quality, habitat destruction, land use, energy sources and consumption, and others. Three lecture hours, two lab hours. (3, 2)

ENV 154
Introduction to Renewable Energy
This course covers all the major technologies and types of renewable energy. It addresses the economic considerations and life cycle analyses for implementing alternative energy systems while explaining environmental/governmental policies, standards, and incentives. The course provides an overview of renewable energy resource assessment, and application. It includes solar thermal, photovoltaics, concentrating collectors, wind energy, geothermal energy, biomass energy, mini hydro, and ocean waves, tides, and currents. It will examine large and small systems for generation of electricity, including village power. It also examines institutional issues such as policies, legislation, regulations and environmental issues and considers economic analyses of the different renewable energies. (3, 0)

ENV 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (800:299)
Non-Intensive English as a Second Language (ESL)

ESL 012 ESL Listening/Speaking
This course is intended to give students exposure to the English language. Major emphasis is on practicing verbal and auditory skills through visuals and activities. Basic competencies and very simple functions and structures are taught. Students are given the opportunity to use their new language in meaningful contexts. (090:090) (3, 0)

Exercise Science

EXS 101 Introduction to Exercise Science
This introductory course will provide the student with a general overview of the disciplines, professions, and research areas associated with the field of exercise science. The basic history, philosophy, theory, educational pathways and career options will be examined. (3, 0)

EXS 216 Foundations of Strength and Conditioning
This course involves the understanding of strength development and the scientific foundations of the body’s adaptation to overload stressors. This course is designed to review the scientific and practical information and present the information in a logical manner. It bridges the gap between scientific study and professional practice and is aimed at coaches, athletes, personal trainers, fitness instructors, and students preparing for a career in a strength and conditioning field. (3, 0)

Finance

FIN 121 Personal Finance
This course is an overview of personal finance planning with emphasis in the areas of personal money management, budgeting, taxes, investments, and risk. This course also covers the process of buying/leasing autos and purchasing a home. Students are introduced to issues relating to credit management and insurance products as well. (3, 0)

Graphic Communications

GRA 112 Introduction to Printing Technologies
This course provides the theory and practical experience of various printing processes. Students tour various printing facilities. Other topics include shop safety. (3, 0)

GRA 131 Digital Layout
This course provides working knowledge of current Adobe Creative Suite layout programs. The focus will be placed on creating effective page layouts combining graphics and type. Topics include the toolbox and tool usage, importing, editing and exporting text and graphics, use of styles, text and paragraph formatting and general layout and design concepts. Software programs such as Adobe Photoshop, InDesign, and Illustrator will be utilized. (3, 0)

Foreign Language-Spanish

FLS 141 Elementary Spanish I
The development of the skill of listening, speaking, writing, and reading within the context of Hispanic culture. Elementary Spanish I is for students who have no knowledge of Spanish or less than one year of high school Spanish. (760:110) (4, 0)

FLS 142 Elementary Spanish II
Prerequisite: FLS 141 Elementary Spanish I or equivalent. This is a continuation of Elementary Spanish I. (One year of high school Spanish is equal to one semester of college Spanish.) (760:111) (4, 0)

Geography

GEO 121 World Regional Geography
A geographic survey of nations and continents with emphasis on important physical characteristics of the major regions of the world. Attention is devoted to their demographic, economic, political, and cultural development with each other. The course covers physical and cultural geography as well as basic geographical literacy. The human impact on the environment and growing problems of resources are discussed. (500:110) (3, 0)

GRA 151 Web Design
Prerequisite: CSC 110 Introduction to Computers or instructor approval. This course will include the integration of text, graphics, animation, sound, and other multimedia applications into Web sites. HTML, CSS, graphical Web editors will be utilized for Web page design. JavaScript, applets, database connectivity, and general site management will also be explored. (360:246) (3, 0)

GRA 158 Web Multimedia
Prerequisite: Previous computer experience or currently enrolled in CSC 110 Introduction to Computers. An introduction to the creation of animation and movies for use with Web pages and other media. Video camcorders and digital cameras will be utilized in conjunction with computer hardware and software for image manipulation. Software such as Windows Movie Maker 2, Adobe Premiere Elements, and Flash
History

**HIS 110 Western Civilization: Ancient to Early Modern**
This course explores the cultural, political, literary, and economic aspects of Western civilization from the first civilizations in Mesopotamia and Egypt to the Greeks and Romans. This course also discusses the conflicts of the Middle Ages, Renaissance, and Reformation. (520:108) (3, 0)

**HIS 111 Western Civilization: Early Modern to Present**
This course explores the cultural, political, literary, and economic aspects of Western civilization from the practice of absolutism to the intellectual revolutions of science, agriculture, and philosophy. This course also discusses the conflicts of the 18th through 21st centuries. (520:109) (3, 0)

**HIS 142 Middle Eastern Studies**
This history of the regions of Asia, Africa, and Europe, commonly referred to as the Middle East, after the advent of Islam will be studied. The geography, political arrangements, economy, leading historic figures, and interaction with other states are in the scope of this class. The history of Islam comprises part of the story. (3, 0)

**HIS 151 U.S. History to 1877**
This course explores the cultural, political, literary, and economic aspects of the colonies as they developed into the United States of America. Such topics as the American Revolution, the Constitution, the Trail of Tears, and the Civil War will be examined. (520:220) (3, 0)

**HIS 152 U.S. History since 1877**
This course explores the cultural, political, artistic, and economic aspects of the United States after the Civil War. Such topics as Reconstruction, World War I, the Roaring Twenties, World War II, the Cold War, and subsequent events will be discussed. (520:221) (3, 0)

**HIS 201 Iowa History**
This course explores the cultural, political, literary, and economic aspects of Iowa's history from the 1700's to the present day. Such topics as prairies, pioneers, prohibition, ethnic patterns and diversity, and the world wars will be discussed. (520:130) (3, 0)

**HIS 224 Nazi Germany**
"Nazi Germany" is a survey of the origins and development of the National Socialist German Workers Party (NSDAP), the foreign policies of Adolph Hitler which led to WWII, and the implementation of the Holocaust. (3, 0)

**HIS 231 Contemporary World Affairs**
This course is designed to be a study of current events viewed in their historical context. Emphasis is placed on global politics, domestic issues, and cultural developments. (3, 0)

**HIS 237 Economics of Health and Healthcare**
This course is designed to provide an overview of health and healthcare economics. Concepts in micro and macroeconomics will be utilized. End products will be student-created movies and images to be used in Web pages and other software. (360:248) (3, 0)

**GRA 173 Typography**
This course explores the many facets of typography: history, function, structure, layout, and design. Introduction of the traditional rules governing typographic usage, selection of an appropriate typeface, setting professional-level type using the computer, and applying type expressively to enhance visual communications. Class critiques and discussions encourage use of technical typographic terminology along with conceptual and analytical thinking skills. (3, 0)

**GRA 176 Layout Design I**
Prerequisite: CSC 110 Introduction to Computers or equivalent or proof of keyboarding competency. A course designed to identify the concepts and applications of desktop publishing. Master the basics of digital layout using Adobe InDesign, the latest environment for designing professional layouts. Prepare, package, and export documents for print and create portfolio-building projects in a hands-on environment. (3, 0)

**GRA 928 Independent Study**
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (360:299)

**GRA 949 Special Topics**
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

**HIS 257 African American History**
This course is designed as a survey of major events and issues in the history of African Americans from the end of slavery to the present. (520:222) (3, 0)

**HIS 266 The Civil War**
This course is an economic, social, political, and cultural survey of the events surrounding the American Civil War, and how they relate to contemporary events. (3, 0)

**HIS 268 American Experience in Vietnam**
A survey of the 2,000-year history of Vietnam, the French Indochina War and U.S. involvement, the military role, the view from those who participated and discussion of the consequences of American participation in the Asian conflict. The conflict will be viewed within the context of the Cold War and explore the events, attitudes and political scene leading up to the United States' commitment in Southeast Asia. Exploration of the anti-Vietnam War movement will also take place. (520:223) (3, 0)

**HIS 271 American Frontier History**
This course provides an introduction in North American frontier history. It is important to always remember that a frontier has two sides. The field includes altercations and interactions among European Americans and Native Americans along contested regions, borders, and cultures. Sovereignty, trade, and culture of British, French, and British imperial powers play important roles in this course. Native American groups are included as well as the moving...
borders of American, Canadian, and Mexican governments. The course textbook is a slim volume which will be augmented with essays available to all students at the online library. Among the topics investigated include territorial conquest, European-Indian relations, imperial conflict, colonialism, gender relations, racial formation, slavery, captivity, and citizenship. (3, 0)

HIS 928  
**Independent Study**  
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (520:299)

HIS 949  
**Special Topics**  
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

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**Health Information Technology**

HIT 301  
**Electronic Health Records**  
This course provides students the opportunity to create, collect, manage, retrieve, and access medical records using an electronic records system. Students will use software to create/edit patient demographic and provider files used in an ambulatory care setting. (3, 0)

HIT 370  
**Health Records in Acute Care**  
This course is an introduction to the profession of Health Information Management and will cover topics such as healthcare in the U.S., professional associations, the health record and its contents, forms and forms design, record retention policies, qualitative and quantitative analysis, filing and number systems, nomenclature and classification systems. (3, 0)

HIT 380  
**Health Records in Alternate Care Settings**  
Prerequisite: HIT 370 Health Records in Acute Care. The record keeping standards of a continuum of health care delivery systems such as long-term care, home care, hospice, ambulatory care and mental health care will be covered in this course. An overview of healthcare facility licensing, accrediting agencies' standards, and government standards and regulations will be included. (3, 0)

HIT 422  
**Medico-Legal Ethics**  
This course is an introduction to the concepts of medical law and ethics for allied health care practitioners. Topics including criminal and civil acts, contracts, negligence and ethical concepts as they relate to the medical profession, health information management, Health Insurance and Portability Accountability Act (HIPAA), and other health care legislative rulings are discussed. (3, 0)

HIT 485  
**Medical Billing and Reimbursement Systems**  
This course is designed to prepare students for jobs in medical office and hospital billing departments. Comprehensive coverage of every stage of the medical insurance claim cycle will be studied in a logical sequence. Basic concepts of medical coding, detailed information on various insurance payers and plans, including Medicare, Medicaid, disability plans, private indemnity plans, and managed care plans will be presented and studied. (3, 0)

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**Health Sciences**

HSC 105  
**Introduction to Health Occupations**  
The course is designed to provide information on career options for individuals who are interested in pursuing a career in the healthcare industry. Students are given opportunities for career exploration through research and projects. Topics include: healthcare delivery systems, legal and ethical issues, health promotion, wellness, and characteristics of healthcare workers. (1, 0)

HSC 109  
**Exploring Health Careers and Building Teams**  
This course is designed to provide information on career options for individuals who are interested in pursuing a career in the healthcare industry. It includes the study of team dynamics and communication techniques necessary to work and succeed in the healthcare field. Students are given opportunities for career exploration through research and projects utilizing the Internet and library databases. It also provides instruction in browsing the Internet, using e-mail, and other computer literacy tools necessary for taking online courses and for careers in the healthcare industry. (3, 0)

HSC 110  
**Introduction to Health Occupations**  
This course is designed to offer students an opportunity to explore health-related professions. (1, 4)

HSC 111  
**Issues in Health and Society**  
This course presents an overview of current issues, concepts, and theories in health. It provides students with well-developed, carefully considered, and sharply opposed points of view on issues in health and society. This course provides both an overview of areas of conflict in health as well as ways of looking at the conflicts. The purpose of this course is to introduce a number of contemporary topics in order to illustrate how controversies are viewed from a healthcare perspective. (3, 0)

HSC 113  
**Medical Terminology**  
Medical terminology is the language of medicine. This course is designed to utilize word parts (prefixes, suffixes, word roots, etc.) in the construction and analysis of medical terms. The course introduces medical terms, etymologies, acronyms, and abbreviations in a structured, anatomical approach. Emphasis is placed on word analysis, spelling, pronunciation, and usage of medical terms. (2, 0)

HSC 114  
**Medical Terminology**  
This course will aid in the student's understanding of core medical terms. Attention will be given to prefixes, suffixes and root words used in the medical field. Exercises stressing the spelling, pronunciation, and usage of medical terms are included. (180:118) (3, 0)

HSC 123  
**Transcultural Concepts in Health Illness**  
This course will explore perception of health and illness among consumers and healthcare providers. Topics will include cultural assessment, health practices of different cultures, conflicts in healthcare and strategies to request and provide culturally sensitive care. (1, 0)

HSC 143  
**Pharmacology**  
This course provides the student with a framework of knowledge to help recognize medication names and classification of medications; understand medication actions and the rationale for treatment; discern between sound-alike medications; understand side effects, allergic effects, and other effects of medications occur; and address various current healthcare issues relating to pharmacology and medications. (3, 0)
**Human Services**

**HSV 140 Social Work and Social Welfare**
This course is an introduction to the field of social services. The services will be examined in terms of the problems addressed and society values that define the issue as a problem. The course will look at policies appropriate to deal with the problem and the effectiveness of the services in dealing with the problem. (3, 0)

**HSV 293 Substance Abuse Treatment & Planning**
This course is designed to introduce students to a multidimensional approach to assessment in making objective patient placement decisions for various levels of care for the treatment and care of substance-related disorders. This course will help prepare students for their practicum experience as recommended by the Substance Abuse Advisory Board. (3, 0)

**Humanities**

**HUM 105 Working in America**
This is a humanities course which has as its theme the interplay of work and the individual. The course is based on the idea that general education at the undergraduate level should include courses and curricula that help students understand the profound role of the humanities, science and technology play in shaping modern society and the human condition. It focuses on technological society and how the humanities can interpret and reflect upon that society. (3, 0)

**HUM 135 Humanities of the Early World**
This course is an integrated humanities course that surveys the major cultural achievements and ideas of Western civilization from ancient Greece through the Middle Ages. Art, architecture, music and drama are presented as they reflect the society and world view of the eras studied. (3, 0)

**HUM 136 Humanities of the Renaissance**
This is an integrated humanities course which surveys the major cultural achievements and ideas of Western civilization from the Renaissance through the 18th century. Art, architecture, music and drama are presented as they reflect the society and the world view of the eras studied. (3, 0)

**HUM 137 Humanities of the Modern World**
This is an integrated humanities course that surveys the major cultural achievements and ideas of Western civilization from the 19th century through the early 21st century. Art, architecture, music and drama are presented as they reflect the society and the world view of the eras studied. (3, 0)

**HUM 164 Non-Western Culture—Japan**
This course is a comprehensive overview of Japanese culture based upon the study of history, geography, religion, customs, values, art, literature, sports, language, and cuisine. The main purpose of this course is to provide the student with a basic understanding of and an appreciation for a non-Western culture. (520:226) (3, 0)

**Industrial Technology**

**IND 114 General Industry Safety**
This course provides instruction on general industry safety and health topics. The course will provide students with the knowledge to recognize the hazards of the workplace and to work safely in or around such hazards. (1, 0)

**IND 134 Print Reading**
This course presents an overview of methods used in presenting and interpreting a variety of industrial blueprints and schematics. Topics will include engineering drawings in machine and electrical fields, construction blueprints, including structural, fabrication, and erection drawings and piping drawings. (2, 0)

**IND 159 Bearings and Lubrication**
A study of friction, force, and lubrication of industrial equipment, preventive maintenance, troubleshooting, and replacement of bearings. (2, 0)

**IND 180 Industrial Heating and Cooling**
This course is designed to prove basic knowledge and skills to work on and troubleshoot heating, ventilation, air handling, and refrigeration systems. (2, 0)

**IND 185 Predictive and Preventative Maintenance**
This course will involve skill development in advanced mechanical maintenance procedures. The students will learn techniques in preventative and predictive operation. The application of laser alignment, thermography, vibration and oil analysis, and other functions will be discussed. (2, 0)

**IND 192 Industrial Pumps**
This course provides basic pump fundamentals/terminology and maintenance and replacement of pump seals, bearings, and start-up procedures. (1, 0)

**IND 195 Mechanical Drives**
The selection, installation, use, maintenance, and troubleshooting of mechanical drives. (3, 0)

**Literature**

**LIT 101 Introduction to Literature**
As a study of the nature and purpose of literature in our culture, this course will include reading, discussion, and evaluation of literary works (including short stories, drama, and poetry) from different countries and different time periods. (400:120) (3, 0)

**LIT 105 Children’s Literature**
This course is a survey of the various types of literature available to children. It provides an introduction to authors and illustrators as well as background material in the field of children’s literature. (400:240) (3, 0)

**LIT 110 American Literature to Mid-1800’s**
This course will provide the student with a general overview of American literature from the pre-Revolution to the mid-19th century.
LIT 111
American Literature since Mid-1800's
This course will provide the student with a
general overview of American literature from the
Civil War to the present. Through the study of
authors and their works, the student will be
able not only to trace the development
of literature in this country but also explain
how the literature of a nation reflects
the popular culture of its time. (400:230)(3, 0)

LIT 140
British Literature I
This course features representative read-
ings in British Literature from the time of
Beowulf until the eve of the Romantic
movement. The course examines leading
works in British Literature in their social,
economic, and political context. Further, the
course reflects the development of different
genres over the years, including changes in
poetry, drama, myth, legend, romance, and
the origins of the novel. (400:250)(3, 0)

LIT 141
British Literature II
This course features representative readings
in British Literature from about 1800 to about
1950. The course examines leading works in
their social, economic, and political context.
Further, the course follows changes in styles
of poetry, drama, and romance and traces the
rise and development of the British novel
as a form of literature. (400:251)(3, 0)

LIT 150
World Literature I
Prerequisites: ENG 105 Composition I and LIT
101 Introduction to Literature. This course is a
survey of writers of the Western and the Eastern
worlds from the ancient Greeks through the
Early Modern Period, considered in the social
and intellectual contexts of the periods. (3, 0)

LIT 161
The Short Story
This literature course introduces students
to the elements of short fiction and the
historical development of the form. Emphasis
is placed upon critical thinking and clear,
coherent oral and written presentations
based upon an analysis and reaction to the
fiction read by students. (400:130)(3, 0)

LIT 177
Dramatic Literature
This course explores drama as a form of literature.
Several significant plays are studied as literature
in a thematic context that includes plays from
Ancient Greece to late Twentieth Century
America. Students will read, discuss, write about,
and interpret the plays in their contexts. (3, 0)

LIT 178
Mythological and Biblical Literature
Every culture tells stories of where we came
from, who we are, and how we should act
toward each other. An understanding of
various world mythologies, especially Greek
and Roman, and of some basic stories from the
Bible, is vital for understanding and
appreciating much of the world's literature and
art. This course will examine these early oral
stories as pieces of literature and how Western
culture has referred to these stories. (3, 0)

LIT 184
Young Adult Literature
This literature course is a study in the genre
known as Young Adult Literature (YAL). Students
will learn the history of the genre, tropes of the
genre, and will be able to experience the many
sub-genres that exist within YAL. Currently, YAL
is read by both adults and young adults and
has become known as cross-over literature.
As such, this class will familiarize students
with many YAL texts, and the readers who
enjoy them, and also challenge them in the
critical analysis of a genre that is read (for the
most part) by people forming their identities.
This course is especially helpful for students
looking to become secondary teachers. (3, 0)

LIT 210
The Graphic Novel
This course explores an emerging new form of
literature, what some have simply called in the
past “comic books.” These texts are complex
visual-textual artifacts, addressing issues on
identity, gender, race, religion, politics, and
history. This course will study the evolution
of the graphic novel, from the “funnies” to a
respected form of literature. Literacy techniques
and theories will be used to analyze the multiple
genres of the graphic novel (adventure, fantasy,
fiction and nonfiction, horror, mystery, sci-fi, and
superhero). Special emphasis will be placed on
image reading, exploring visual language, and
rhetoric an important 21st century skill. (3, 0)

LIT 928
Independent Study
A student/instructor designed course
intended for concentrated or advanced study.

MAT 041
Basic Math
This course provides the student with an
opportunity to build a solid foundation of
basic math skills. Topics covered include whole
numbers, fractions, decimals, ratio and propor-
tions, percents, and applications for business
and consumers. Students may use this course
to prepare for MAT 743 Technical Math, BUS
110 Business Math and Calculators, MAT 052
Pre-Algebra, standardized tests, and general
consumer applications. (090:124)(3, 0)

MAT 052
Pre-Algebra
Prerequisite: Recommended by COMPASS/
ACCUPLACER score. This is a course intended for
students who have had no previous experience
in algebra. The course covers the following
topics: whole numbers, introduction to algebra,
integers, solving equations and problem
solving, fractions, decimals, graphing, ratio and
proportion, and percent. (090:126)(3, 0)

MAT 062
Elementary Algebra
Prerequisite: Recommended COMPASS/
ACCUPLACER score or MAT 052 Pre-Algebra. This
course is intended for students who have had
minimal experience in the topics of algebra.
The course covers the following topics: basic
operations of real numbers, solving linear
equations and inequalities, graphing, linear
equations, exponents, polynomials, roots and
radicals, solving word problems, factoring,
and applying formulas. (090:128)(3, 0)

MAT 063
Elementary Algebra
Prerequisite: Appropriate COMPASS/
ACCUPLACER score. This course is designed
to provide students with an introduction to
basic algebra. Topics include signed
numbers, exponents, algebraic expressions,
polynomials, roots and radicals, factoring,
linear equations and inequalities, systems of equations, graphing, and applications. (4, 0)

MAT 080
Math Skills I
This individualized course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:120) (1, 0)

MAT 081
Math Skills II
Prerequisite: MAT 080 Math Skills I. This is a continuation of MAT 080. This individualized course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:121) (1, 0)

MAT 082
Math Skills III
Prerequisite: MAT 081 Math Skills II. This is a continuation of MAT 081. This individualized course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:122) (1, 0)

MAT 083
Math Skills IV
Prerequisite: MAT 082 Math Skills III. This is a continuation of MAT 082. This individualized course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:123) (1, 0)

MAT 101
Intermediate Algebra
Prerequisite: One year of high school algebra or MAT 062 Elementary Algebra. The course will entail a review of basic algebra. Topics to be covered include factoring, exponents, operations on algebraic expressions, solving equations and inequalities, radicals, rational expressions, graphing linear and quadratic functions, using formulas, and solving word problems. (900:110) (3, 0)

MAT 102
Intermediate Algebra
Prerequisite: MAT 063 Elementary Algebra. This course is applicable only to students who have basic knowledge of algebra. Reinforcement of topics from elementary algebra stressing problem solving, drills, conclusions obtained from graphs and other data, and a substantial expansion of radical equations. New topics are variations, exponential functions and logarithms, and quadratic equations. (4, 0)

MAT 104
Applied Math Topics
Prerequisite: MAT 063 Elementary Algebra. This course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:120) (1, 0)

MAT 105
Intermediate Algebra
Prerequisite: MAT 063 Elementary Algebra. This course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:120) (1, 0)

MAT 106
Precalculus
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. This course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:120) (1, 0)

MAT 107
Precalculus
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. This course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:120) (1, 0)

MAT 108
Precalculus
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. This course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:120) (1, 0)

MAT 109
Precalculus
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. This course is designed to help the student improve mathematic skills used in everyday life and in specialized areas. The primary goals are to assure understanding of mathematic concepts and to practice the skills necessary to improve proficiency in using them. Attention is given to the unique needs of individual students. (090:120) (1, 0)

MAT 110
Math for Liberal Arts
Prerequisite: Two years of high school algebra or MAT 101 Intermediate Algebra or recommended COMPASS/ACCUPLACER score. Students will use critical thinking in their study of logic, sets, and statistical reasoning. Students will perform problem-solving and decision-making by studying probability and application of statistical data, modeling, and financial mathematics. Absuses of mathematical data, the history of mathematics, and applications of mathematics in art, music, business, and politics will also be surveyed. (3, 0)

MAT 111
Math for Liberal Arts
Prerequisite: MAT 102 Intermediate Algebra. This course provides a broad mathematical knowledge to calculate, analyze, and solve day-to-day problems. Topics include number theory and the real number system, algebra, graph and data interpretation, calculator usage, mathematical reasoning process, problem-solving techniques, probability and statistics, geometry, and consumer mathematics. (4, 0)

MAT 112
Math for Liberal Arts
Prerequisite: MAT 102 Intermediate Algebra. This course provides a broad mathematical knowledge to calculate, analyze, and solve day-to-day problems. Topics include number theory and the real number system, algebra, graph and data interpretation, calculator usage, mathematical reasoning process, problem-solving techniques, probability and statistics, geometry, and consumer mathematics. (4, 0)

MAT 113
Math for Liberal Arts
Prerequisite: MAT 102 Intermediate Algebra. This course provides a broad mathematical knowledge to calculate, analyze, and solve day-to-day problems. Topics include number theory and the real number system, algebra, graph and data interpretation, calculator usage, mathematical reasoning process, problem-solving techniques, probability and statistics, geometry, and consumer mathematics. (4, 0)

MAT 114
Math for Liberal Arts
Prerequisite: MAT 102 Intermediate Algebra. This course provides a broad mathematical knowledge to calculate, analyze, and solve day-to-day problems. Topics include number theory and the real number system, algebra, graph and data interpretation, calculator usage, mathematical reasoning process, problem-solving techniques, probability and statistics, geometry, and consumer mathematics. (4, 0)

MAT 115
Math for Liberal Arts
Prerequisite: MAT 102 Intermediate Algebra. This course provides a broad mathematical knowledge to calculate, analyze, and solve day-to-day problems. Topics include number theory and the real number system, algebra, graph and data interpretation, calculator usage, mathematical reasoning process, problem-solving techniques, probability and statistics, geometry, and consumer mathematics. (4, 0)

MAT 116
Math for Liberal Arts
Prerequisite: MAT 102 Intermediate Algebra. This course provides a broad mathematical knowledge to calculate, analyze, and solve day-to-day problems. Topics include number theory and the real number system, algebra, graph and data interpretation, calculator usage, mathematical reasoning process, problem-solving techniques, probability and statistics, geometry, and consumer mathematics. (4, 0)

MAT 117
Math for Elementary Teachers
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. This course is designed for elementary teacher education. It is a study of the history of numerals and systems of numeration, sets, relations and their properties, operations on the whole numbers, base ten and other base systems, integers, rational numbers, real numbers, and topics from geometry. (900:140) (3, 0)

MAT 120
College Algebra
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. Topics to include: the real and complex number systems and Cartesian coordinate system. Additional concepts include polynomial, exponential, and logarithmic functions as well as matrix algebra, systems of equations, conic sections and sequences/series. (900:160) (3, 0)

MAT 121
College Algebra
Prerequisite: MAT 102 Intermediate Algebra. This course addresses linear functions and inequalities, quadratics, conics, polynomials and rational functions, exponential and logarithmic functions, linear systems, matrices and determinants. Additional topics may include sequences, series, permutations, combinations, and probability. (4, 0)

MAT 127
College Algebra and Trigonometry
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. Topics to include: the real and complex number systems and Cartesian coordinate system, also polynomial, exponential, logarithmic, and trigonometric functions, matrix algebra, systems of equations, conic sections, and sequences/series. (900:180) (5, 0)

MAT 128
Precalculus
Prerequisite: MAT 121 College Algebra. A higher-level mathematics course intended to prepare students for calculus or advanced science courses. Topics covered include logarithms and exponential functions, trigonometric functions, complex numbers, analytic geometry, and topics in the theory of equations. A graphing calculator is required. (4, 0)

MAT 134
Trigonometry and Analytic Geometry
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. Topics in trigonometry include, but are not limited to, measurement of angles, arc, and sectors, the six trigonometric functions and their graphs, trigonometric identities and equations, law of sines and cosines, vectors, complex numbers, and polar coordinates. Topics in geometry include an analytic investigation of the conic sections. Additional topics include congruence, area, parallelism, similarity, and volume in Euclidean geometry. (900:170) (3, 0)
### MAT 150 Discrete Math
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. Discrete mathematics, also known as 'discrete' mathematics, is the study of objects that are distinct entities. The topics covered in this course include logic, sets, relations, functions, recursion, induction, and counting principles. (3, 0)

### MAT 156 Statistics
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 101 Intermediate Algebra. Statistics is the study of data. It is the science of collecting, organizing, analyzing, and interpreting data. The topics covered in this course include descriptive statistics, probability, and inferential statistics. (3, 0)

### MAT 165 Business Calculus
Prerequisite: MAT 121 College Algebra. This course continues where MAT 120 College Algebra left off. The topics covered include limits, derivatives, applications of the derivative related to business, social science, and the life sciences, integration, and applications of the integral related to business, social science, and the life sciences. (3, 0)

### MAT 210 Calculus I
Prerequisite: Recommended COMPASS/ACCUPLACER score or MAT 127 College Algebra and Trigonometry. This course introduces the student to single variable calculus. The topics covered include limits and continuity, derivatives, applications of the derivative, and integration. (900:202) (4, 0)

### MAT 219 Calculus III
Prerequisite: MAT 218 Calculus II. This course studies vectors, vector-valued functions and motion in space, partial derivatives, multiple integrals, and integration in vector fields. (900:252) (4, 0)

### MAT 225 Differential Equations
Prerequisite: MAT 219 Calculus III. This course studies ordinary differential equations, matrices and solutions of linear equations, eigenvalue methods for systems of linear differential equations. (900:262) (3, 0)

### MAT 743 Technical Math
Applied math skills are reviewed and concepts in measurement, basic algebra, graphs, geometry, and trigonometry are covered. (900:093) (3, 0)

### MAT 928 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (900:299)

### MAT 949 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. (3, 0)

### MGT 101 Principles of Management
No prerequisite, however BUS 102 Introduction to Business is recommended. Management principles, as applied to all business enterprises, are covered. Planning, organizing, directing, controlling, and coordinating functions in the management cycle are emphasized. (320:255) (3, 0)

### MGT 110 Small Business Management
This course introduces the student to various types of small business opportunities. Students will use concepts from the course to develop a business plan designed to guide the startup of a new business. The course also covers topics relevant to small business management, including marketing, operational management, financial management, human resource management, and regulations. (320:130) (3, 0)

### MGT 170 Human Resource Management
This course is a combination of theoretical and practical approaches to human resource management. Topics include, but not limited to, job design, employee selection, employee development, employee appraisal, and employee termination. Federal statutes relating to EEO, Affirmative Action, OSHA, and Labor Unions are explored. Employee compensation and fringe benefit packages are also discussed. (3, 0)

### MGT 928 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (320:299)

### MGT 949 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. (3, 0)

### Manufacturing

**MFG 102 Machine Shop Tools I**
Students will learn the various types of machine shop tools and the proper usage of such tools. (1, 0)

**MFG 336 CNC Plasma Operations**
This course introduces students to computer numerical control as related to CNC plasma cutting. The use of computers and related software is covered. It will emphasize input language, codes, machine setup and operation, and inspection of parts. Safety is always emphasized throughout all courses. Parts produced with the CNC plasma will be used for welding projects in the program. (1, 4)

### Marketing

**MKT 110 Principles of Marketing**
An introduction to the concepts of marketing. Topics presented include a study of the history of marketing, the marketing process, the mix of marketing elements, and the implementation
of a marketing strategy. Students are encouraged to view business situations from a marketing perspective including a review of the economic and social aspects of business exchange transactions. (320:245) (3, 0)

**MKT 150 Principles of Advertising**

This course explores the communication element of the marketing mix. It covers topics of advertising, personal selling, publicity/public relations, and direct marketing. (3, 0)

**MKT 928 Independent Study**

A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (320:299)

**MKT 949 Special Topics**

Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

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## Music-Applied

**MUA 101*/MUA 102* Applied Voice/Applied Voice II**

One half-hour private lesson weekly. Emphasis is placed on music fundamentals, the development of range, understanding note values, articulation, dynamic control, tone production, and the development of music reading skill. This is accomplished by a thorough study of technical material, etudes, and solo literature. Additional out-of-class practice time is required. (780:150) (0, 2)

**MUA 113 Vocal Improvisation**

Explorations of techniques and musical ideas necessary for creative vocal improvisation. This course includes scales, modes, harmonic/melodic devices, use of syllables, listening, and transcriptions. (780:234) (0, 2)

**MUA 115* Vocal Jazz Workshop**

This workshop will introduce and further student knowledge of vocal jazz and choral music. In addition, the ability to sing and improvise with a rhythm section will also be a significant component of the workshop. The class will also cover jazz theory, history, and rehearsal techniques.

**MUA 116*/MUA 117* Applied Jazz Voice/Applied Jazz Voice II**

One half-hour private lesson weekly. Covers vocal technique and literature. Primary emphasis is on the development of student vocal capacity and creativity. Additional out-of-class practice time is required. (780:164) (0, 2)

**MUA 120*/MUA 220* Applied Piano/Applied Piano II**

One half-hour private lesson weekly. The study of classical piano technique and literature. Students perform regularly in student recitals. Additional out-of-class practice time is required. (780:152) (0, 2)

**MUA 124*/MUA 298* Applied Guitar/Applied Guitar II**

One half-hour private lesson weekly. Emphasis is placed on music fundamentals, the development of range, understanding note values, articulation, dynamic control, tone production, and the development of music reading skills. This is accomplished by a thorough study of technical material, etudes, and solo literature. Additional out-of-class practice time is required. (0, 2)

**MUA 128*/MUA 228* Applied String Bass/Applied String Bass II**

One half-hour private lesson weekly. Emphasis is placed on music fundamentals, the development of range, understanding note values, articulation, dynamic control, tone production, and the development of music reading skills. This is accomplished by a thorough study of technical material, etudes, and solo literature. Additional out-of-class practice time is required. (0, 2)

**MUA 136 Jazz Keyboard I**

Co-requisite: MUS 180 Arranging I. Designed to develop keyboard, ear, and writing facility by playing standard chord progressions and songs in effective voicing in all keys; covers the line of fifths, using 9th, 11th, and 13th chords, suspensions, and harmonic embellishments. (780:120) (2, 0)

**MUA 137 Jazz Keyboard II**

Prerequisite: MUA 136 Jazz Keyboard I. Co-requisite: MUS 181 Arranging II. Designed to develop keyboard, ear, and writing facility by playing standard chord progressions and songs in effective voicing in all keys; covers the line of fifths, using 9th, 11th, and 13th chords, suspensions, and harmonic embellishments. (780:121) (2, 0)

**MUA 138*/MUA 238* Applied Jazz Piano/Applied Jazz Piano II**

One half-hour private lesson weekly. The study of advanced harmonic and melodic materials employed in contemporary jazz piano performance. Additional out-of-class practice time is required. (780:162) (0, 2)

**MUA 139* Solo Jazz Performance and Literature I**

This course covers technique for communicative performance; includes standard repertoire, improvisation, song forms, stage presence, microphone technique, jazz inflections, and communication with the accompanist or rhythm section. Students perform regularly in class. (780:130) (1, 0)

**MUA 143*/MUA 144* Applied Brass/Applied Brass II**

One half-hour private lesson weekly. Emphasis is placed on music fundamentals, the development of range, understanding note values, articulation, dynamic control, tone production, and the development of music reading skills. This is accomplished by a thorough study of technical material, etudes, and solo literature. Additional out-of-class practice time is required. (780:156) (0, 2)

**MUA 170*/MUA 171* Applied Woodwinds/Applied Woodwinds II**

One half-hour private lesson weekly. Emphasis is placed on music fundamentals, the development of range, understanding note values, articulation, dynamic control, tone production, and the development of music reading skills. This is accomplished by a thorough study of technical material, etudes, and solo literature. Additional out-of-class practice time is required. (780:154) (0, 2)

**MUA 180*/MUA 181* Applied Percussion/Applied Percussion II**

One half-hour private lesson weekly. Emphasis is placed on music fundamentals, the development of range, understanding note values, articulation, dynamic control, tone production, and the development of music reading skills. This is accomplished by a thorough study of technical material, etudes, and solo literature. Additional out-of-class practice time is required. (780:158) (0, 2)

**MUA 236 Jazz Keyboard III**

Prerequisite: MUA 137 Jazz Keyboard II. Co-requisite: MUS 280 Arranging III. This course covers more complex chord progressions in all keys; includes tritone relationships, alternative chord voicing, and other forms of chord substitution; covers finding the correct harmonic
structure of songs inaccurately notated in simulated books through the understanding of the line of fifths; includes idiomatic keyboard devices for introductions, ii-V progressions, and codas; students accompany performers in recitals and final projects. (780:220) (2, 0)

MUA 237
Jazz Keyboard IV
Prerequisite: MUA 236 Jazz Keyboard III. Co-requisite: MUS 281 Arranging IV. Explores complex chord progressions in all keys; includes tritone relationships, alternative chord voicing, and other forms of chord substitution; covers finding the correct harmonic structure of songs inaccurately notated in simulated books through the understanding of the line of fifths; includes idiomatic keyboard devices for introductions, ii-V progressions, and codas; students accompany performers in recitals and final projects. (780:221) (2, 0)

MUA 239*
Solo Jazz Performance and Literature II
Continuation of MUA 139 Solo Jazz Performance and Literature I. Emphasis is on the creative performance; includes standard repertoire, improvisation, song forms, stage presence, microphone technique, jazz inflections, and communication with the accompanist or rhythm section. Students perform regularly in class. (780:230) (1, 0)

MUA 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (780:299)

MUA 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

*Indicates courses are repeatable once. Second level can only be taken if student successfully passed first level twice.

Music-General

MUS 100
Music Appreciation
This course will help the student learn how to listen to music, to make sense of what he/she hears, and increase his/her perceptive powers. The course covers the changing musical scene from the Renaissance to the present. (780:110) (3, 0)

MUS 102
Music Fundamentals
This course offers a background in the fundamentals of music and introduction to the basic fundamentals of sight singing, and simple piano chording. The course provides the necessary prerequisites for the first year music theory course for music majors and elementary music methods for elementary teachers. (780:210) (3, 0)

MUS 103
Music Fundamentals II
This course is a continuation of MUS 102 Music Fundamentals. This course offers a background in the fundamentals of figured bass analysis, harmonizing a melody in common practice style, keyboard sight-reading, four-part closed, unison, and two-part jazz arranging, jazz keyboarding, voicings, and melodic and rhythmic dictation. (780:211) (3, 0)

MUS 120
Music Theory I
This course is an introduction, via analysis and written assignments, to tonal harmony that focuses on learning tools for the analysis of Bach chorales and four-part writing in the common practice style. (780:116) (3, 0)

MUS 121
Music Theory II
Prerequisite: MUS 102 Music Fundamentals. This course is a continued study of conventional musical techniques of the Baroque and classical eras, mainly through writing. Students will learn to write such pieces as: a piano sonata, a fugue exposition, and Bach style chorales. (780:117) (3, 0)

MUS 130
Aural Skills I
This course begins with the recognition and notation of simple intervals, rhythms, melodies and chord progressions, and advances to four-part dictation. This course includes recognition of 9th, 11th, and 13th chords and transcribing recorded musical examples, which includes reading music literature in various styles. (780:114) (2, 0)

MUS 131
Aural Skills II
A continuation of MUS 130 Aural Skills I. This course continues with the recognition and notation of simple intervals, rhythms, melodies and chord progressions, and advances to four-part dictation. This course includes recognition of 9th, 11th, and 13th chords and transcribing recorded musical examples, which includes reading music literature in various styles. (780:115) (2, 0)

MUS 140*/MUS 141*
Concert Choir/Concert Choir II
The study and performance of traditional choral literature. Emphasis is on developing stylistic awareness, aesthetic sensitivity, and a mature musicianship in each singer. The choir performs regionally and on extended concert tours. (780:170) (0, 2)

MUS 145*
Concert Band
The study and performance of traditional wind band literature. Emphasis is on developing stylistic awareness, aesthetic sensitivity, and a mature musicianship in each player. The band is open to students and to members of the community and performs at least one concert each semester. (780:290) (0, 2)

MUS 157*/MUS 227*
Vocal Jazz Ensemble/Vocal Jazz Ensemble II
The study and performance of vocal jazz literature. Each student participates in a four to eight member group, with each ensemble functioning as a rehearsal and performing entity with its own repertoire. Ensembles perform locally and most groups perform on extended concert tours. (780:172) (0, 2)

MUS 163*/MUS 182*
Instrumental Jazz Ensemble/Instrumental Jazz Ensemble II
The study and performance of small group jazz in a combo setting. Focus will be on learning tunes from the standard jazz repertoire. Existence of these ensembles is contingent upon the participation of a sufficient number of students. (Open to all students by audition.) (780:188) (0, 2)

MUS 170*
Jazz Band
Co-requisites: MUS 145 Concert Band and MUA 124, 128, 143, 170, or 180 Applied Lessons/MUA 298, 228, 144, 171, or 181 Applied Lessons II. The study and performance of classic and contemporary literature for a large jazz ensemble. The ensemble records and performs locally, regionally, and on extended concert tours. (Open to all students by audition.) (780:182) (0, 2)

MUS 180
Arranging I
Co-requisite: MUA 136 Jazz Keyboard I. This course is an introduction via analysis and written assignment to jazz arranging. The class focuses on learning the tools necessary to arrange in unison and four-part closed writing. (780:125) (2, 0)
MUS 181
Arranging II
Prerequisites: MUA 136 Jazz Keyboard I and MUS 180 Arranging I. Co-requisite: MUA 137 Jazz Keyboard II. A continuation of MUS 180 Arranging I. Delves into more complex four-part writing. The class focuses on learning the tools necessary for open four-part writing and introduces two-part writing. (780:126)(2, 0)

MUS 190*/MUS 192*
Jazz Improvisation/Jazz Improvisation II
Prerequisite: MUS 103 Music Fundamentals II. An introduction to playing, mechanics, instrumental literature, and instructional methods used in creating improvisational music. The course is designed to prepare the student for the skills needed to both improvise and teach improvisation. (780:233)(1, 0)

MUS 194
Fundamentals of Recital
This course will develop a student's musical capacities by presenting a public performance. The performance will include classical piano and jazz piano along with classical voice or a classical instrumental piece. (780:147)(0, 2)

MUS 195
Freshman Recital
A public performance in a half-recital which is a continuation of the final project format on a more substantial basis. (780:149)(0, 2)

MUS 196
Fundamentals Final Project
Under faculty guidance, and drawing on the complete range of their academic efforts during the semester, students present a public performance demonstrating their semester achievements. Typically, projects include classical solos on the student's applied instrument and piano, jazz solos in the same mediums, and performance of the student's arrangements and/or composition, which are rehearsed and conducted by the student. (780:146)(0, 2)

MUS 197
Final Project I
The student will develop his/her musical capacities by presenting a public performance addressing most classes and performance skills in their academic schedule. (780:148)(0, 2)

MUS 198
Psychology of Success
This course covers self-management, work habits and process, balancing personal, social and academic roles, setting and achieving goals, time and stress management, interpersonal relationship and communication, self-concepts, and values. (780:100)(1, 0)

MUS 200
Music History I
This course is a survey of Western music with an emphasis on the compositional and stylistic evolution of Western music as evidenced in the works of selected pivotal composers. (780:231)(3, 0)

MUS 201
Music History II
Music history from 1750 is part of a two-semester survey course. This course will cover the broad issues and developments in Western musical history from the Pre-Classical period through the 20th century. Listening assignments, essays, and written examinations will supplement and support lecture and discussion topics. (780:236)(3, 0)

MUS 204
History of Rock and Roll
A study of Rock and Roll from the mid 1950s to the present. Designed to create critical listeners of popular culture music through analysis of song forms, rock band instrumentation, and the political, cultural, and social significance of song lyrics. (3, 0)

MUS 205
Jazz History and Appreciation
Study the elements and history of jazz music with concentration on critical listening skills. It will include a review of jazz history, styles, genres, form and content, schools of composers/performers and social/historical events of the past and present that influence music selections. (3, 0)

MUS 220
Music Theory III
Prerequisite: MUS 121 Music Theory II. The course focuses on the writing and analysis of music of the Romantic and Early Impressionistic periods. (780:218)(3, 0)

MUS 221
Music Theory IV
Prerequisite: MUS 220 Music Theory III. The class will study classical music of the 20th century, and will focus largely on writing original work in the classical style. (780:219)(3, 0)

MUS 230
Fundamentals Skill Development
This course will provide a hands-on environment for students to develop musical skills. Students learn to become more competent in the following areas: rhythmic conception, rhythmic transcription, and melodic and harmonic transcription. In addition, this class will serve to reinforce concepts discussed in the MUS 102 Music Fundamentals course. (780:209)(2, 0)

MUS 260
Introduction to Studio Engineering and Production
This course discusses basic electronic theory, equipment selection and use, and the engineer's and producer's role in the creative process. It also covers preparation for recording sessions, multi-track recording techniques, the use of common studio signal processing devices, mixing, editing, and mastering the final product. Class members function as engineers and producers in simulated recording projects. (780:241)(2, 0)

MUS 262
Recording Studio Performance
This course is designed to introduce the student to recording studio performance. Students create rhythm tracks and perform as instrumentalists and vocalists in a variety of musical settings. Students also gain the tools and experience necessary to operate industry standard hardware/software. Course emphasis is on developing music transcription, musicianship, and attitudes necessary to work effectively in a professional recording situation. (780:240)(2, 0)

MUS 280
Arranging III
Prerequisite: MUS 181 Arranging II. Co-requisite: MUA 236 Jazz Keyboard III. Course emphasis is on writing for instrumental groups. Transposition, layout, orchestration, reharmonization, linear and block writing, and various musical styles will be covered. (780:227)(2, 0)

MUS 281
Arranging IV
Prerequisite: MUS 280 Arranging III. Co-requisite: MUA 237 Jazz Keyboard IV. Student work will culminate with writing for a jazz big band. (780:228)(2, 0)

MUS 290
Fundamentals of Conducting
This course is designed to develop the skills necessary for efficient rehearsal of jazz and traditional literature, which emphasizes keyboard facility and ear development. It also covers techniques that promote maximum ensemble retention of musical material and concepts. (780:245)(2, 0)

MUS 295
Sophomore Recital
The student will develop his/her musical capacities by presenting a public performance addressing most classes and performance skills in their academic schedule. (780:249)(0, 2)
MUS 296
Final Project II
Under faculty guidance and drawing on the complete range of their academic efforts during the semester, students present a public performance demonstrating their semester achievements. Typically, projects include classical solos on the student’s applied instrument and piano, jazz solos in the same mediums, and performance of the student’s arrangements and/or composition, which are rehearsed and conducted by the student. (780: 248) (0, 2)

MUS 303
Introduction to Studio Engineering Technology
A freshman-level music elective designed specifically to introduce the student to the tools and skills necessary to operate a recording session and all the hands-on mixing/editing processes required to create a studio product that is professional in quality according to today’s industry standards. Course emphasis is on developing the quickness, musicianship, and attitude necessary to work effectively in a professional recording environment. Students in this course will serve as the recording engineers for the sophomore-level class, MUS 260 Introduction to Studio Engineering and Production. (2, 0)

MUS 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (780: 299)

MUS 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

*Indicates courses are repeatable once. Second level can only be taken if student successfully passed first level twice.

Computer Networking

NET 122
Computer Hardware Basics
Students will be trained to properly install, configure, upgrade, troubleshoot, and repair microcomputer hardware. This will include having basic knowledge of desktop and portable systems, basic networking concepts, and printers. Students will also be asked to demonstrate knowledge of safety and common preventive maintenance procedures. This course will prepare students to take Comp TIA’s A+ Certification Exam. (360: 160) (3, 0)

NET 132
Operating Systems Software Basics
Prerequisite: NET 122 Computer Hardware Basics. This course provides students with the knowledge and skills that are needed to identify PC network components, network structures, and network topologies. Emphasis will be placed on function, structure, operating systems, and file management. Students will receive hands-on experience with installation, configuration, and upgrading systems and networks. This course will prepare students to take Comp TIA’s A+ Certification Exam. (360: 165) (3, 0)

NET 212
CISCO Networking
The course addresses the latest skills needed by network technicians, such as basic principles on how to install, upgrade, troubleshoot, and secure networks. The course covers network technologies, media and topologies, devices, management, tools, and security. This course will assist in preparing students for a career in network support or administration or academic training, while also preparing them for the CISCO CCENT-1 Certification. (2, 0)

NET 270
Mobile Applications Development
In today’s business environment, we have traveling sales forces, cottage industries, and integrated server platforms. Mobile apps are a large part of the digital economy. They are a growing trend in entertainment, network communications, and information management. Traditional media now has to fit on mobile platforms and be compatible with thousands of devices and configurations. This course will prepare students for multi-platform mobile applications development. (3, 0)

NET 333
Implementing Windows Network Infrastructure
This course provides students with the knowledge and skills to implement, manage, and maintain a Microsoft Windows Server 2012 network infrastructure. The course is intended for systems administrator and systems engineer candidates who are responsible for implementing, managing, and maintaining server networking technologies. These tasks include implementing routing; implementing, managing, and maintaining Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), and Windows Internet Name Service (WINS); securing Internet Protocol (IP) traffic with Internet Protocol security (IPSec) and certificates; implementing a network access infrastructure by configuring the connections for remote access clients; and managing and monitoring network access. (360: 277) (2, 2)

NET 500
Network Virtualization
This course provides hands-on experience in mass data storage, movement of data, and disaster recovery. The course provides students the knowledge and skills with large scale data management through modern virtualization techniques. Students will build a virtual datacenter where they will gain the practical knowledge required to evaluate, plan, implement and manage modern datacenter environments. (360: 278) (3, 0)

NET 612
Fundamentals of Network Security
This course focuses on the overall security processes with particular emphasis on hands-on skills in the following areas: security policy design and management, security technologies, products and solutions, firewall and secure router design, installation, configuration, and maintenance, AAA implementation, Intrusion Detection (IDS) implementation, and VPN implementation using routers and firewalls. (360: 296) (2, 2)
Physical Education Activities

PEA 112* Basketball
Emphasis will be placed on developing skills in basketball with a high degree of carry-over value. Rules and strategies of the game will be emphasized throughout the course. (0, 2)

PEA 121* Circuit Wellness
This course is designed for individuals interested in improving total fitness via aerobic-based conditioning program. The course will involve weight training, treadmill, and various aerobic exercises to elicit improvement in physical fitness. (660:105) (0, 2)

PEA 131* Disc Golf
Disc golf is a low-cost, lifetime sport activity that people of all ability levels can play and enjoy. The class will focus on throwing skills, game rules, and etiquette. (0, 2)

PEA 176* Volleyball I
Activity course with emphasis on developing skills of volleyball with a high degree of carryover value. Rules and strategies of the game emphasized throughout participation in the course. (660:111) (0, 2)

PEA 187* Weight Training I
Activity course with emphasis on developing the student's total physical conditioning by improving strength, flexibility, muscle, and cardiovascular respiratory endurance. The student will develop a basic understanding of weight training and its effects on the human body. (660:115) (0, 2)

PEA 192* Walking I
A basic activities course with emphasis on activities with a high degree of carry-over value. Basic fundamentals of walking and stretching are stressed. (660:108) (0, 2)

PEA 928 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (660:299)

PEA 949 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. *Indicates courses are repeatable.

Coaching/Officiating

PEC 101 Introduction to Coaching
This course is designed to prepare the student to meet the challenges of modern-day coaching. The intention is to expose the student to a variety of coaching philosophies. This course will provide the student with coaching techniques to meet the needs of today's athlete. (660:290) (3, 0)

PEC 108 Sports and Society
Explores pervasive appeal of sports in American society. Interrelationships among sport, behavior, culture and social institutions of business, religion, politics, education and family will be examined. (660:286) (3, 0)

PEC 126 Athletic Injury Prevention
This course introduces conditioning programs and training methods that tend to prevent athletic injuries. This course provides basic skills in injury procedures. This is one of four courses leading to the coaching authorization issued by the Iowa Department of Education as a head coach or assistant coach of any interscholastic athletic activity. (2, 0)

PEC 128 Care and Prevention of Athletic Injuries
This course is designed to introduce the prospective coach and physical educator to the role of the athletic trainer in injury prevention, training, treatment, and rehabilitation of the athlete. The student is given the opportunity to develop the skill of athletic taping and the use of various methods of training and rehabilitation programs. (660:271) (3, 0)

PEC 928 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (660:299)

PEC 949 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Physical Education and Health-General

PEH 110 Personal Wellness
Personal Wellness is designed to introduce students to all aspects of a healthy lifestyle. Key wellness topics will be presented with focus areas on appropriate exercise, heart health, body composition, nutrition, emotional health, and risk factors to a healthy lifestyle. (2, 0)

PEH 111 Personal Wellness
Personal Wellness is designed to introduce students to all aspects of a healthy lifestyle. Key wellness topics will be presented with focus areas on appropriate exercise, heart health, body composition, nutrition, emotional health, and risk factors to a healthy lifestyle. The three credit component of Personal Wellness will include a project where students...
create a plan involving exercise science, nutrition, and strength training. (3, 0)

PEH 141  
First Aid  
A study in theory and practice to develop an understanding of the principles and procedures of emergency care in the case of accidents, sudden illness, or disaster; and to develop basic skills of handling these cases until the services of a physician are available. (660:250) (2, 0)

PEH 142  
First Aid  
A study in theory and practice to develop an understanding of the principles and procedures of emergency care in the case of accidents, sudden illness, or disaster; and to develop basic skills of handling these cases until the services of a physician are available. The three-credit component of First Aid will involve creation of a functional first aid kit. (3, 0)

PEH 162  
Introduction to Physical Education  
This course will provide the student an opportunity to gain a basic understanding of the various fields in physical education. It will allow the student to understand career opportunities in physical education, health, recreation, and sports, while gaining knowledge of the history, trends, and objectives of physical education in relation to general education. (660:280) (3, 0)

PEH 255  
Principles of Sports Management  
Introductory course that presents business principles and procedures as applied to physical education, intramural and recreational sports programs, and school and professional sports programs. (660:285) (3, 0)

PEH 928  
Independent Study  
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (660:299)

PEH 949  
Special Topics  
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

**Indicates courses are repeatable.**  
**Prerequisite:** Permission of the head coach of each particular sport. These courses provide credit for PEV varsity sports earned by participation as a regular member of a varsity team and fulfilling all requirements of a team member. Team members will gain knowledge and develop skills through conditioning, practice, game preparation, and weight training. Actual game or meet participation is not necessary. These courses are one credit courses and can be repeated for a maximum of two credits each. (660:222, 660:220, 660:221, 660:224, 660:223, 660:226)

**Philosophy**

PHI 101  
Introduction to Philosophy  
Philosophy is the basis of all fields of study. This course follows the development of Western philosophy from aboriginal shamans, prior to the Greek philosophers, to minorities and women of the 21st century. (790:200) (3, 0)

PHI 105  
Introduction to Ethics  
This course has two major sections. Approximately one-third of this course will be theory. Students will study various concepts of ethical reasoning. Two-thirds of the course will consider specific issues for today's society and the 21st century. Topics will include, but are not limited to: euthanasia, economic justice, animal rights, medical issues, agricultural issues, and environmental concerns. (790:210) (3, 0)

PHI 928  
Independent Study  
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (790:299)

PHI 949  
Special Topics  
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

**Physical Science**

PHS 113  
Introduction to Physical Science  
A survey of the basic concepts of astronomy and physics, recommended for students who have not had high school physics. Lecture, demonstration and laboratory. (3, 2)

PHS 125  
Physical Science (w/lab)  
Prerequisite: MAT 101 Intermediate Algebra or instructor approval. This is an introductory general education course in the physical sciences for students with very little background in science. The topics covered are selected from the fields of chemistry and physics and their
Physics

PHY 110 Survey of Physics I 3
Prerequisite: MAT 062 Elementary Algebra or minimum math placement score based on college assessment. This is the first of two introductory courses in conceptual physics. Students will learn key concepts in physics and develop problem solving skills in mechanics, heat, and sound. The student will become proficient in topics from mechanics, heat, and sound. Applications of physics to the human body are included. (3, 0)

PHY 162 College Physics I (w/lab) 4
Prerequisite: MAT 101 Intermediate Algebra. This course covers basic topics in algebra-based physics including Newtonian mechanics, heat and energy, and the relationships between these fields. Three lecture hours, two lab hours. (830:150)(3, 2)

PHY 172 College Physics II (w/lab) 4
Prerequisite: PHY 162 College Physics I. This course is a continuation of PHY 162 College Physics I. Topics include electricity, magnetism, light and imaging systems, and modern physics. Three lecture hours, two lab hours. (830:151)(3, 2)

PHY 212 Classical Physics I (w/lab) 5
Prerequisite or concurrently: MAT 210 Calculus I. The broad areas of study include kinematics, dynamics, forces in balance, momentum, work and energy, circular and rotational motion, gravitation and orbits, solids and elasticity, wave phenomena, and thermodynamics. Four lecture hours, two lab hours. (830:210)(4, 2)

PHY 222 Classical Physics II (w/lab) 5
Prerequisite: PHY 212 Classical Physics I. This is a continuation of PHY 212 Classical Physics I. The broad areas of study include fluids, temperature and heat, thermodynamics, electricity and magnetism, electromagnetic waves, geometric optics, wave phenomena, light, and atomic structure. Four lecture hours, two lab hours. (830:211)(4, 2)

PHY 928 Independent Study 1-3
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (830:299)

PHY 949 Special Topics 1-3
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Practical Nursing

PNN 172 Fundamentals of Nursing I 4
Theories regarding concepts of asepsis, comfort, consumer and nurse safety, medical terminology and communication are presented. Lab experience reinforces related techniques and practices. (200:101)(2.5, 3, 0)

PNN 173 Fundamentals of Nursing II 4
Concepts of surgical asepsis, restorative and preventive practices and legal responsibilities are presented. Lab provides practical experience in preparation for clinical practice. (200:103)(3, 0, 3)

PNN 208 Pharmacology Basics 3
Recommended for pre-nursing students. This course enables the student to learn basic principles of drug therapy, including related terminology and legislation, drug properties, and the care provider’s role and responsibility for the patient receiving drug therapy. (3, 0)

PNN 231 Pharmacology 3
Pharmacology enables the student to learn basic principles of drug therapy, including related terminology and legislation, drug properties, and the nurse’s role and responsibility for the patients receiving drug therapy. This course will be integrated into all areas of nursing. It will provide the student a knowledge base of pharmacology upon which to build his/her related course of study. (200:136)(3, 0)

PNN 434 Maternal - Child Health 4
A study of the normal maternity cycle as it occurs within the family structure. This course includes anatomy and physiology of reproduction, prenatal, perinatal, postnatal care, and care of children from newborn to adolescent. The clinical phase will be included with medical-surgical exposure, and maternal child patients will be assigned as they are admitted to the hospital unit. (200:150)(3, 0, 3)

PNN 531 Medical - Surgical Nursing I 7
The student will study medical surgical nursing building on the information gained in PNN 172 and 173 Fundamentals of Nursing I and II. The student will learn to apply the nursing process and carry out nursing interventions in the role of the licensed practical nurse. Hospitals provide the student with experience in pediatric, adult, and geriatric patient care. The nursing home provides the student with a more in depth gerontological or geriatric learning situation. A study of diet and therapy and pharmacology upon which to build his/her related course of study. (200:165)(2, 0, 3)
Political Science

POL 110 Introduction to Political Science
This course is an overview of the role of modern government in our society. Students will examine the role of government in creating solutions to such contemporary problems as environmental control, law and order, minority groups, poverty, military relations, etc. This course is designed to familiarize students with how our government works to accomplish its goals. This introductory course is an overview of the basic principles and processes of the American political system. This course will include a study of the role of institutions, individuals, and interest groups in the process of governance. It will also examine the impact of political theorists and political ideologies on domestic and foreign systems of governance. (3, 0)

POL 111 American National Government
This course reviews the structure of the American political system stressing the constitutional framework, the role of Congress, the Presidency, and the Supreme Court. Other topics include voting behavior, interest groups, and political parties. (540:210) (3, 0)

POL 112 American State and Local Government
This course examines the sub-national levels of government in the United States. Within the framework of constitutional federalism, the governmental organization of the states is studied along with the roles of governor, legislature, and the state courts. (540:220) (3, 0)

POL 928 Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (540:299)

POL 949 Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Psychology

PSY 111 Introduction to Psychology
An introductory course to the scientific study of human behavior and mental processes. This course includes such topics as the background of modern psychology, personality development, brain and behavior, heredity and environment, learning and motivation, emotional processes, intelligence, human interaction, and psychological disorders. (600:100) (3, 0)

PSY 121 Developmental Psychology
Prerequisite: PSY 111 Introduction to Psychology or instructor approval. This course affords the student an overview of the psychology of human growth and development from conception through death. Emphasis is placed upon the continuous interaction and inter-relationship of these processes with environmental forces and conditions that influence patterns of behavior. Major developmental theories are presented: cognitive, personality, social, and behavioral. (600:220) (3, 0)

PSY 171 Health Psychology
This course provides an introduction to the contributions of psychology to the understanding of causes of physical illness, prevention and treatment of physical illness, doctor-patient relationships, and health care policy. Inquiry will include the clinical, social, personality, cognitive, developmental, and physiological psychology; public health; and the medical, sociological, and health outcomes of health policy research. The course intends to help the student become aware of the wide-range of psychological considerations that arise in health, the benefits of complementing traditional medical approaches with psychological perspectives and an understanding of stress management in the prevention of illness and disease. Although the course is primarily directed to students of psychology, it has relevance for students and professionals in several areas, including health care, nursing, social work, counseling, and education. (600:220) (3, 0)

PSY 222 Child Psychology
This course is designed for students to analyze psychological development of the child in relation to the biological, physical, and sociological antecedent conditions from prenatal to adolescent stages. Emphasis on contemporary theories of child psychology, including physical growth and development, personality and social learning, cognition and perception, and language development. (3, 0)

PSY 223 Child and Adolescent Psychology
This course focuses on the interplay of biological factors, human interactions, cultural forces and social structure which shape the growing child from conception through adolescence. (3, 0)

PSY 224 Adolescent Psychology
Prerequisite: PSY 111 Introduction to Psychology. This course explores the rapid physical, social, emotional, and cognitive changes of adolescents. Students distinguish myths about adolescence from research findings and examine the importance of cultural and historical factors in this crucial transition from childhood to adulthood. (3, 0)

PSY 226 Psychology of Aging
This course will examine the physical, cognitive, social, and psychological changes that occur across the adult years and the factors influencing development in each area. Individual differences in the aging process will be emphasized with attention to the factors contributing to individual differences and the relevance of individual differences in addressing aging issues. The influence of society and societal attitudes toward older adults and the aging process will also be addressed. Additional learning opportunities will include interactions with older adults in various situations including those in nursing homes, assisted living homes, retirement homes, and living independently in the community. (3, 0)

PSY 228 Death and Dying
This course will introduce students to the study of death and dying and the cultural, social, biological, and psychological aspects of death and dying. Topics to be covered include the reality and definition of death, the grief process, care of the dying, cultural customs related to death and dying, views and attitudes toward death and dying, and the scientific, legal, and ethical issues surrounding death and dying. (3, 0)

PSY 236 Psychology of Personality
This course provides an in-depth study of concepts related to personality development, description, assessment and special problems. Emphasis is given to the fields of psychoanalytic, behavioral, self-actualization, and existentialism. (3, 0)
PSY 241  
**Abnormal Psychology**  
Prerequisite: PSY 111 Introduction to Psychology or instructor approval. A descriptive survey of major classifications of mental illness emphasizing principles of diagnosis, theories of etiology, and therapeutic approaches. (600:230) (3, 0)

PSY 246  
**Introduction to Counseling Skills**  
This course is designed to provide students with three essential components relative to the fields of counseling and human services. These are 1) to attain a foundation in the theories of psychotherapy. In this course, selected prominent theories of psychotherapy, which provide guidelines for understanding human problems and for selecting interventions for these problems, will be studied. 2) To learn "helping" skills so that students can begin to practice micro-counseling techniques in the classroom. 3) To gain knowledge about the large number of occupational choices within the field of counseling and human services. (3, 0)

PSY 251  
**Social Psychology**  
Prerequisite: PSY 111 Introduction to Psychology or instructor approval. A survey of theories regarding individual, interpersonal, and group behavior in social contexts includes the study of attitudes, social perception, social influence, attraction, conformity, power leadership, status, and norms. (600:240) (3, 0)

PSY 261  
**Human Sexuality**  
Prerequisite: PSY 111 Introduction to Psychology or SOC 110 Introduction to Sociology. This course will provide students with more definitive and precise information about the nature of human sexuality and gender roles. An interdisciplinary approach will be used to present a more comprehensive view stressing biological, social, and psychological aspects of sexuality and gender roles. (3, 0)

PSY 262  
**Psychology of Gender**  
This course is designed to explore the differences between the male and female gender from conception through adulthood. Differences in abilities and attitudes which arise from biology and the brain will be emphasized, although socio-cultural explanations for differences will also be discussed. In addition, the differences in the use of language and communication by males and females will be explored. The goal of the course is to understand these differences and to decide how males and females can use this understanding to communicate with each other and to augment appreciation for the cross-sex. (3, 0)

PSY 281  
**Educational Psychology**  
Prerequisite: PSY 111 Introduction to Psychology or instructor approval. Psychological theories, techniques, and principles are explored and analyzed for their effects on education. Applications of these psychological tools are explained and illustrated as they have been applied in education. This course requires service learning and observation. (600:255) (3, 0)

PSY 928  
**Independent Study**  
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (600:299)

PSY 949  
**Special Topics**  
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. (1-3)

**Reading**

RDG 005  
**Reading and Study Skills**  
These courses provide the student with the basic strategies for college success, including development of time management skills, identify their own learning style, active reading and note taking strategies, along with strategies for strengthening comprehension and improving vocabulary skills. Students will practice and utilize methods for reading/learning from textbooks, assignments, outlining/summarizing, and for taking exams/tests. (090:110) (1, 0)

RDG 006  
**Reading and Study Skills II**  
Prerequisite: RDG 005 Reading and Study Skills. This is a continuation of RDG 005. (090:111) (1, 0)

RDG 007  
**Reading and Study Skills III**  
Prerequisite: RDG 006 Reading and Study Skills II. This is a continuation of RDG 006. (090:112) (1, 0)

**Religion**

REL 101  
**Survey of World Religions**  
This course traces the development of religion from aboriginal beliefs to New Age. Both Western and Eastern religions will be studied. (790:215) (3, 0)

REL 928  
**Independent Study**  
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (790:299)

REL 949  
**Special Topics**  
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students. (1-3)

**Student Development**

SDV 103  
**Successful Learning**  
Successful learning is a course to help students learn to master academic and personal skills needed to succeed in higher education and life. The course will cover academic, communication, and life management skills (1, 0)

SDV 108  
**The College Experience**  
This course is designed to help students develop academic success skills by connecting students to college resources and facilitating participation in college culture. Activities include study and classroom performance strategies, personal exploration and development, academic and career planning, and exploring the college experience. (1, 0)

SDV 114  
**Strategies for Academic Success**  
This course is designed to help students learn and practice skills that will enable them to be
successful in their academic courses. Topics covered include time management, concentration and memory, learning styles, critical reading and thinking, mastery of college textbooks, note taking, writing, and test-taking. (640:100) (3, 0)

SDV 153
Pre-Employment Strategies
This course is designed to aid the student in developing the skills and materials necessary to obtain employment and to emphasize the development of characteristics associated with job success. Due to the nature of this class, students should take this course in their final semester or at least no earlier than two semesters before they graduate. (320:106) (2, 0)

SDV 155
Strategies for College Reading
This introductory course prepares students to read college textbooks and related course material. Emphasis is on developing the ability to apply, monitor, and adjust reading strategies for increased understanding. (1, 0)

SDV 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (320:299)

SDV 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Sociology

SOC 110
Introduction to Sociology
This course may be defined as the scientific study of human society and the social interactions which emerge among people. It seeks to develop a body of interrelated scientific propositions or generalizations that explain social behavior in holistic terms. The basic goal is to understand how human beings fit their activities together into a system of social arrangements. As such, sociology focuses on the groups, organizations, institutions, and communities, which make up the larger society. Introduction to Sociology seeks to place society in the international setting of today's changing world. More importantly, it helps us to understand the relationships among these various social units, and the implications of these relationships for order and change. (620:110) (3, 0)

SOC 115
Social Problems
Prerequisite: SOC 110 Introduction to Sociology or CRJ 100 Introduction to Criminal Justice or instructor approval. This course is intended to provide a conceptual framework within which to examine social problems. It provides a sociological perspective concerning some of the key contemporary social problems at the local, national, and global levels. Students will critically analyze issues that affect individuals, relationships, communities, and the environment. Topics will include, but are not limited to, crime, social deviance, family and generational problems, population, urban and rural problems, poverty, and discrimination. (620:200) (3, 0)

SOC 120
Marriage and Family
Prerequisite: SOC 110 Introduction to Sociology or instructor approval. This course analyzes the sociological, physical, psychological, legal, and economic aspects of the American family. Included are investigations of courtship and marriage relationships, preparations for marriage relationships, preparation for marriage, family, parenthood, interpersonal relationships, and marital adjustment. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthesis, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. (3, 0)

SOC 125
Understanding Parenting
Prerequisite: SOC 120 Marriage and Family or PSY 121 Developmental Psychology. This course is an introduction to principles of parenting within multidimensional contexts including developmental, structural, and cultural perspectives. An interdisciplinary approach will be used to present a more comprehensive view of the parent-child relationship from birth through young adulthood and parenting challenges such as single parenthood, divorce/stepfamilies, same-sex households, adolescent parents, and cross-racial/cultural group families. High-risk families with issues such as violence and dependency/addiction will be explored in regards to parenting issues. (3, 0)

SOC 160
Introduction to Social Work
This introductory course in social welfare systems and social work practice surveys the historical development of the social work profession in conjunction with the development of social welfare systems in the United States, social welfare system responses to a variety of current social problems, generalist social work as a distinct profession, and specific settings and methods of social work practice. Emphasis is given to practical application of social work concepts and to students' development of accepted social work ethics and perspectives. Students are also encouraged to explore social work fields of practice that are of interest to them. (3, 0)

SOC 200
Minority Group Relations
This course offers an introduction to the sociological study of the cultural diversity in American society. It will enable the student to understand some of the problems and complexities involved in the relationships among the many groups that compose our diverse society. It will deal with racial, cultural and other minority/subordinate groups within the United States. (3, 0)

SOC 928
Independent Study
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (620:299)

SOC 949
Special Topics
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

Speech

SPC 101
Fundamentals of Oral Communication
Students will develop speaking and listening skills by studying and applying communication theories and principles. Public speaking, small group communication, and interpersonal communication will be emphasized. (440:210) (3, 0)

SPC 112
Public Speaking
Principles of speech communication; preparation, delivery, and adjustment to the audience; informative and persuasive speaking. Emphasis on both speaking and listening. (3, 0)
“Interpersonal Communication” 3
This course examines one to one communication in relationships including friends, family, intimates, and workplace associates. Theories and concepts related to interpersonal communication will be discussed. Students will also work to improve their own interpersonal communication skills. This course is particularly helpful to students entering the business, medical, psychology and education fields. (3, 0)

“Independent Study” 1-3
A student/instructor designed course intended for concentrated or advanced study. Approval by the Offices of Instruction and Student Services is required. (440:299)

“Special Topics” 1-3
Special Topics expands the curriculum by allowing students to enroll for up to three credits in a specific course or program area. Subject matter may be an in-depth extension of the particular area and is developed by the teaching faculty to meet unique interests and needs of the students.

“Welding” 3

“WEL 111 Welding Blueprint Reading” 3
A course concerned with basic fundamentals of interpreting drafting as applied in the welding trade. Emphasis is placed on developing the ability to interpret blueprints from which the welder must work. Special emphasis is placed on lines, views, material descriptions, welding symbols, and terms. (3, 0)

“WEL 114 Introduction to Fabrication” 3
This course develops the skills needed in a manufacturing atmosphere such as tool usage, layout methods and material estimating. (2, 2)

“WEL 124 Maintenance Welding” 3
This course is designed for Industrial Technology students to gain basic principles of welding skills for the repair and modification of machines and fixtures. Students will study and practice basic welding principles involving shielded metal arc welding, oxyacetylene welding and tungsten inert gas or gas metal arc welding in the flat, horizontal, and vertical positions. (2, 2)

“WEL 139 Introduction to Oxyacetylene Welding, Cutting and Brazing” 2
This course provides a thorough technical understanding of metallurgy, oxyacetylene welding, flame cutting and brazing fundamentals and develops skills necessary to produce high quality fillet and square groove welds in 3/16” plate. Students will develop understanding of weld hazards and safety procedures throughout the course. (1, 2)

“WEL 162 Introduction to Shielded Metal Arc Welding (SMAW)” 3
This course provides a thorough technical understanding of shielded metal arc welding fundamentals, weld hazards and weld safety, power sources and electrode selection. Provides ample time and direction to develop skills necessary to make high quality welds on 1/8” or 1/4” mild steel in all positions, but primarily. (2, 2)

“WEL 224 Advanced Shielded Metal Arc Welding (SMAW)” 3
Prerequisite: WEL 162 Introduction to Shielded Metal Arc Welding (SMAW) or equivalent. An advanced course designed to develop skills, integrity, and confidence necessary to pass skills tests on pre-qualified joints on plate and structural steel as required of code welding by the American Society of Mechanical Engineers and American Welding Society. The course also includes information relating to air-arc cutting and gauging procedures and welder qualifications, testing of welds, and metal identification. (2, 2)

“WEL 225 Introduction to Gas Metal Arc Welding” 3
This course provides a technical understanding of the gas metal arc welding process, power sources and adjustment, metal transfer, shielding gases and weld safety. It also develops skills necessary to produce high quality welds of 1/16” to 3/8” mild steel in all positions. Students will develop skills necessary to produce and bend test single vee groove welds on 3/8” carbon steel in all positions according to American Welding Society code of requirements. (2, 2)

“WEL 226 Flux Core Arc Welding” 3
This course provides a thorough technical understanding of the flux core arc welding process adjustment and operation of the power source, types of arc shielding and safe operating procedures. Quality welds are produced on 3/8” to 1” carbon steel in all positions. (2, 2)

“WEL 227 Advanced Gas Metal Arc Welding” 3
Prerequisite: WEL 225 Introduction to Gas Metal Arc Welding. This course is designed to give students advanced theory and skills in gas metal arc welding. Emphasis is on safety, tubular and pipe welding and welding in the vertical and overhead positions. (2, 2)

“WEL 229 Introduction to Gas Tungsten Arc Welding” 3
This course provides a thorough technical understanding of the TIG (Heliarc) process including metal characteristics, electrode, filler metals, and shielding gases with emphasis on weld safety and procedures. (2, 2)

“WEL 231 Advanced Gas Tungsten Arc Welding” 3
Prerequisite: WEL 229 Introduction to Gas Tungsten Arc Welding. Develop skills necessary for making high quality all position welds on schedule 10 to schedule 40 carbon steel pipe; preparation and testing pipe is included. (2, 2)

“WEL 264 Repair Welding and Advanced Fabrication” 4
Design and fabrication of various projects to include the basic design and use of jigs and fixtures. Repair and maintenance of...
projects employing the major welding processes and repair methods. (1, 6)

**WEL 800**

**Welding Capstone**

This class is the capstone course for the welding program. Students are required to design and construct projects using several approved welding processes to demonstrate the ability to analyze welding problems and to make decisions that use the most economical and practical welding process for the given task. This course concentrates on the advanced study of materials and methods, including joint work, adhering to specifications, fabrication of equipment, and completion of special projects. (1, 6)

**WEL 932**

**Internship**

This course provides students with opportunities to gain on-the-job experience in the welding industry. Students will gain an understanding of qualities and skills needed for success in the welding field. Coordination and guidance will be provided by the department instructor(s). To enroll in the internship, students must have successfully completed the first year welding technology curriculum. (0, 0, 0, 16)
Employees

Administration and Staff
Administration Center
Ag Site
Allied Health & Science Center
Instructional Center
Maintenance Building
Off-Campus Centers
Performing Arts Center
Residence Halls
Student Center
Technical Center I

Full-Time Faculty
Administration and Staff
(Listed by office location)

Administration Center
Administration
Dr. Barbara J. Crittenden, President
B.S.N. Graceland College
M.S. Iowa State University
Ph.D. Iowa State University
Mary Jo Skarda, Administrative Assistant/Board Secretary
Tom Lesan, Vice President of Economic Development
B.A. University of Iowa

Instruction
Bill Taylor, Vice President of Instruction
B.S. Northwest Missouri State University
M.Ed. University of Missouri
Lindsay Stoaks, Assistant Vice President of Instruction
B.A. Iowa State University
M.S. Iowa State University
Jan Pettit, Administrative Assistant/Instruction

Business Office
Tia Samo, Chief Financial Officer
B.A. Simpson College
Denise Kelley, Budget Accountant
Stephanie Newton, Accountant
Erin Kiley, Coordinator of Student Accounts
Sasha Miller, Business Office Cashier
Betty Spangler, Accounts Payable
Denise Fisk, Switchboard Operator

Human Resources
Jolene Griffith, Director of Human Resources
Beth Larsen, Payroll Specialist

Student Services
Beth Kulow, Dean of Student Services
B.S. Western Illinois University
M.A. University of Northern Iowa
Sandy Webb, Registrar, Administrative Secretary
Deb Pantini, Director of Student Development
Georgia Paulsen, Student Services Secretary, Veterans Coordinator
Alyssa Riley, Student Services Office Assistant

Admissions
Caitlyn Maitlen, Director of Admissions
Lauren England, Coordinator of Admissions
Doug North, Admissions Representative & CTE Recruiter
Deb Peterson, Admissions Representative
Amanda Horvat, Office Manager, Admissions

Financial Aid
Sarah Freestone, Director of Financial Aid
Kysa Gordon, Financial Aid Awards Coordinator
Becca Slick, Verification Coordinator
Kylee Klommnhaus, Financial Aid Specialist

Marketing and Enrollment Management
Terri Higgins, Director of Marketing and Enrollment Management
Joel Wires, Marketing Coordinator/Designer
Alyssa Riley, Marketing/Institutional Advancement Assistant

Ag Site
Keith Hoepker, Farm Assistant
Greg Crill, Farm Assistant

Allied Health & Science Center
Faculty Assistant
Julie Wallace, Nursing Secretary

Simulation Lab
Diane Carr, Retention Specialist
Brooke Owen, Simulation Lab Coordinator/Grant Coordinator

Instructional Center
Assessment Center
Marilyn Werner, Assessment Center Coordinator
Lisa Shawler, Assessment Center Secretary

Computer Services
Scott Helm, Director of Information Technology
John Doyle, PC Technician/Network Specialist
Martin Reeves, Senior Programmer Analyst
Paul Russell, System and Database Administrator
Darrell Ellis, I.T. Technician

Copy Center
Carla Damewood, Copy Center Coordinator

Distance Education
Doug Greene, Director of Distance Education
Sharon Dunfee, Office Assistant/Instruction/Distance Education
Terri Tussey, Secretary

Faculty Assistants
Byron Bilderback, Automotive Maintenance and Repair Lab Assistant
Sue Claiser, Automotive Parts Clerk
Diane Hudson, Science Lab Assistant
Steve Westphal, Auto Collision Repair Lab Assistant

Learning Resource Center
Ann Coulter, Director of Learning Resource Center
Helen Waigand, Media Assistant
Aric Bishop, Library Assistant

Secondary Programs
Rachel Ramaeker, Coordinator of Secondary Programs
Ann Schlapia, Workplace Learning Network Coordinator
Terri Tussey, Secondary Programs Secretary
Emily Uhlenkamp, Vocational Rehabilitation Intermediary Network Coordinator

Success Center
Linda Buxton, ELL Outreach Specialist
Rand Hazelton, Academic Success Specialist
Heidi Lombard, HISET Spanish Instructor
Tessa Otto, Academic Success Coach
Jan Lesan, Retention Specialist

**TRIO-Student Support Services**
Laurie Besco, Program Director
Keith Olsen, Advising Coach
Andrea Rivera Rojas, Advising Coach
Lisa Chapin, Office Manager/FYE Coordinator

**Maintenance Building**

**Building and Grounds, Housekeeping, and Maintenance**
Tom King, Director of Plant Services
Rosemary Vanderpluym, Housekeeping Supervisor
Dale Barnett, Electrician
Jeanine Adkins
Melissa Andrews
Bryan Beaman
Rod Case
Audrey Clark
Dan Coenen
Greg Crill
George Davis
Terry Evans
Lise Kelen
Alan King
Jeff King
Rick McIntosh
Monica Pettit
Michael Sheldahl
Jason Swierczek
Winn Thornton
Ron White

**Bus Drivers**
Tracey Evans, Transportation Coordinator
Todd Daily
Gaylen Goodvin
Fred Lorenzen
Robert Pringle
Steve White

**Off-Campus Centers**

**Osceola Center**
Sue Stearns, Center Coordinator
Lucy Black, Office Manager
Barb Chadwick, Office Assistant

**Red Oak Center**
Katie Lewis, Center Coordinator
Angie Hayes, Office Manager
Joleen Elwood, Office Assistant
Deb Frazee, STEM Hub Manager - Southwest Region

**Performing Arts Center**

**Adult Education**
Darla Helm, Adult Literacy Program Coordinator
Jolene Frost, Pathway Navigator

Kim Oaks, Coordinator, Business/Industry & Workforce Preparation
Cherlyn White, Secretary
Peggy Worthington, Secretary
Janet Wuebker, Health Occupation Education Coordinator

**Early Childhood Education (ECE) Program**
Kristie Nixon, Early Childhood Education Program Director
Victoria Brammer, Parents as Teachers (PAT) Educator
Ryan Hoeft, Parents as Teachers (PAT) Educator
Lyndsie Wagoner, Parents as Teachers (PAT) Educator
Stacey Feehan, Librarian
Brandi Snyder, ECE Librarian

**Small Business Development Center**
Brandi Shay, Regional Director

**Residence Halls**
Lindsay Stumpff, Director of Residential Life
Paige Cassady, Residence Hall Coordinator/Head Softball Coach
Aleesha Cleaver, Residence Hall Coordinator/Head Volleyball Coach
Scott Davis, Residence Hall Coordinator/Assistant Men's Basketball Coach
Addae Houston, Residence Hall Coordinator/Head Women's Basketball Coach
Morgan Knorr, Residence Hall Coordinator/Assistant Women's Basketball Coach
Kenny Namanny, Residence Hall Coordinator/Assistant Baseball Coach
Jordan Stronfeli, Residence Hall Coordinator/Assistant Cross Country Coach/Assistant Track & Field Coach

**Student Center**

**SWCC Shoppe**
Jana Scott, Manager
Melissa Kirkland, SWCC Shoppe/Central Supply Clerk

**Student Activities/Athletics**
Tracey Evans, Student Activities Coordinator
Todd Lorenzen, Athletic Director/Fundraiser

**Baseball**
Pedro Hernandez, Head Baseball Coach/Physical Education Instructor
Kenny Namanny, Assistant Baseball Coach/Residence Hall Coordinator

**Men's Basketball**
Todd Lorenzen, Head Men's Basketball Coach
Scott Davis, Assistant Men's Basketball Coach/Residence Hall Coordinator

**Women's Basketball**
Addae Houston, Head Women's Basketball Coach/Residence Hall Coordinator
Morgan Knorr, Assistant Women's Basketball Coach/Residence Hall Coordinator

**Bowling**
Ron Pendegraft, Head Bowling Coach

**Cross Country**
TBD, Head Cross Country Coach
Jordan Stronfeli, Assistant Cross Country Coach/Assistant Track & Field Coach/Residence Hall Coordinator
Dance Team  
Kaeleigh Ballentine, Dance Team Coach

Golf  
Doug North, Head Golf Coach

Softball  
Paige Cassady, Head Softball Coach/Residence Hall Coordinator  
Morgan Knorr, Assistant Softball Coach

Sports Shooting  
Marc Roberg, Sports Shooting Coach  
Steve Maltzahn, Assistant Sports Shooting Coach

Track & Field  
TBD, Head Track & Field Coach  
Jordan Strofaci, Assistant Track & Field Coach/Residence Hall Coordinator

Volleyball  
Aleesha Cleaver, Head Women's Volleyball Coach/Residence Hall Coordinator  
Rand Hazelton, Assistant Women's Volleyball Coach

Technical Center I  
Educational Talent Search  
Erica Frey, Director of Educational Talent Search  
Kelly Allee, Outreach Advisor  
Valerie White, Outreach Advisor  
Bobbie Patten, Student Success Specialist  
Dana Steinbach, Secretary

Full-Time Faculty  
(Listed alphabetically by last name)

Mark Bonneville, Electrical Technology Instructor  
Technical Center I, Office 116  
A.A. North Hennepin Community College, 1983  
B.A. Crown College, 2016  
Iowa Master Electrician License  
Iowa Electrical Contractors License  
Iowa Contractors License

Holly Booth, CPA, Business & Information Technology Instructor  
Instructional Center, Office 203F  
A.S. Southwestern Community College, 1985  
B.A. Buena Vista University, 1990  
M.B.A. Drake University, 1999

Tom Borland, Business & Information Technology Instructor  
Instructional Center, Office 203D  
A.A. & A.S. Southwestern Community College, 2002  
B.A. Graceland University, 2004  
M.S.Ed. Northwest Missouri State University, 2006

Joshua Borgmann, English Instructor  
Instructional Center, Office 808  
B.A. Drake University, 1997  
M.A. Iowa State University, 1999  
M.F.A. University of South Carolina, 2005

Dr. Barb Brown, Business & Information Technology Instructor  
Instructional Center, Office 203B  
B.S. Northwest Missouri State University, 1999  
M.B.A. Bellevue University, 2002  
Ed.D. Argosy University, 2015  
Additional Work - Northwest Missouri State University

Melissa Butler, Nursing Instructor  
Allied Health & Science Center, Office 910  
B.S. Creighton University, 1998  
A.A.S. R.N. Southwestern Community College, 2010

Suzanne Carlson, Nursing Instructor  
Allied Health & Science Center, Office 910  
B.S. Ed. Northwest Missouri State University, 1977  
A.A.S. R.N. Southwestern Community College, 1995  
B.S.N. Graceland University, 2009  
M.S.N. Graceland University, 2009

Rena Cheers, Nursing Instructor  
Allied Health & Science Center, Office 912  
A.A. Southwestern Community College, 1993  
L.P.N. Diploma Southwestern Community College, 1995  
A.A.S. R.N. Southwestern Community College, 1997  
B.S.N. Grand View University, 2007

Linda Dainty, Art Instructor  
Instructional Center, Office 818  
B.F.A. Iowa State University, 1992  
M.F.A. The Savannah College of Art and Design, 1995  
M.A. Iowa State University, 1999

Dennis Downing, Carpentry Instructor  
Technology Center I, Office 123  
B.A. Central College, 2008  
Certified Carpenter License  
NCCER (National Center for Construction Education & Research)

Micah Elefson, Welding Instructor  
Technical Center I, Office 133  
Additional Work - Graceland University, University of Central Missouri

Dawn Esser, English (Communication) Instructor  
Instructional Center, Office 806  
B.A. Central College, 1990  
M.A. University of Northern Iowa, 1999
Kelly Franklin, English Instructor
*Instructional Center, Office 807*
- A.A. Parkland College, 2008
- B.A. Eastern Illinois University, 2010
- M.A. Eastern Illinois University, 2013
- Additional Work - Capella University

Kyle Harvey, Carpentry Instructor (Secondary Programs)
*Technical Center I, Office 118*
- 20+ years experience in residential and commercial construction
- Certified Carpentry Instructor
- NCCER (National Center for Construction Education and Research)

Pedro Hernandez, Physical Education Instructor
*Instructional Center, Office 727*
- B.A. Iowa Wesleyan College, 2010
- M.Ed. Dallas Baptist University, 2012

Randy Hughes, History Instructor
*Instructional Center, Office 817*
- B.A. University of Northern Iowa, 1970
- M.A. Northwest Missouri State University, 1979

Stephen Jefferies, English Instructor
*Instructional Center, Office 805*
- B.A. Eastern Illinois University, 2008
- M.A. Eastern Illinois University, 2014

Rumy Kabir, Information Technology Systems Networking Instructor
*Technical Center II, Office 111*
- B.S. Northwestern Oklahoma State University, 2007
- M.Ed. Iowa State University, 2013

Henry Lemke, Industrial Technology Instructor
*Technical Center II, Office 101/102*
- 25 years experience in industrial maintenance
- Certified OSHA Forklift Trainer
- Certified Crane Inspector
- Electrical Meter Certification

Tim Leonard, Psychology Instructor
*Instructional Center, Office 814*
- B.A. Simpson College, 1985
- M.A. Connecticut College, 1987

Dr. Lori Lester, Biology, Anatomy and Physiology Instructor
*Instructional Center, Office 334*
- B.B.A. University of Iowa, 1984
- D.C. Palmer College of Chiropractic, 1996

Regina Long, Business & Information Technology Instructor
*Instructional Center, Office 203 E*
- B.S. Northwest Missouri State University, 1991
- M.A. Vitterbo College, 1998

Jeff Magneson, Auto Collision Repair/Refinish Instructor
*Instructional Center, Office 408*
- ASE Certified Master Collision Repair/ Refinish Technician
- ASE Estimating Certification
- I-CAR Platinum Individual Combination Lead Instructor
- I-CAR Training Alliance Member
- I-CAR Gold Class Member
- ASE/NATEF Member
- Iowa Collision Repair Association Member
- Diploma, Auto Body Repair, Southwestern Community College, 1980

Justin Mann, Mathematics Instructor
*Instructional Center, Office 812*
- A.A. Eastern New Mexico University, 1995
- B.B.A. Eastern New Mexico University, 1999
- M.S. University of Nebraska-Omaha, 2001

Lucas Mattson, Professional Music Instructor
*Instructional Center, Office 527*
- A.A. Southwestern Community College, 1998
- B.A. Northern Arizona University, 2001

Susannah Miller, Agricultural Instructor
*Ag Center, Office 101*
- B.S. Iowa State University, 2004
- M. Agr. Iowa State University, 2015

Jody Nedley-Newcomb, Sociology Instructor
*Instructional Center, Office 816*
- A.A. Southeast Community College, Beatrice, NE, 1994
- B.S. Peru State College, 1994
- M.S. University of Nebraska- Lincoln, 1997

Joe Pastorino, Business & Information Technology Instructor
*Instructional Center, Office 203 A*
- B.A. University of Iowa, 1994
- M.B.A. University of Northern Iowa, 1997
- Additional Work - University of North Dakota

Deborah Roberts, Mathematics Instructor
*Instructional Center, Office 813*
- A.A. Southwestern Community College, 1990
- B.S. Ed. Northwest Missouri State University, 1993
- M.S.M. Iowa State University, 2003

Steven Schmalzried, Automotive Repair Technology Instructor
*Instructional Center, Office 416*
- Air Conditioning Compliance Certification, 1992
- ASE Certified Master Technician, 1995
- AC Delco Trained Service Technician, 2000
- C-1 Service Consultant, 2003
- L-1 Advanced Engine Performance, 2008
Kathryn Scott, Nursing Instructor  
*Allied Health & Science Center, Office 909*  
- A.A.S. R.N. Southwestern Community College, 1988  
- B.S.N. Grand View College, 2005  
- M.S.N. Ed. Clarkson College, 2009  
- Additional Work – Graceland University

Wade Sick, Physics/Mathematics Instructor  
*Instructional Center, Office 312*  
- B.A. University of Northern Iowa, 1983  
- M.A. University of Northern Iowa, 1991  
- Additional Work - University of Iowa, University of Nebraska

Mindy Skarda, Biology Instructor  
*Instructional Center, Office 302*  
- B.S. Arkansas State University, 1991  
- M.S. Northwest Missouri State University, 1995

Jason Smith, Vocal Music Instructor  
*Instructional Center, Office 526*  
- B.A. Gonzaga University, Spokane, WA, 1981

Jeff Sorensen, Automotive Repair Technology Instructor  
*Instructional Center, Office 412*  
- Universal Technical Institute, Automotive Mechanics, 1983-1984  
- General Motors Corporation, 1984-1986  
- ASE Certified Master Technician, 2000  
- ASE Maintenance and Light Truck Repair Technician  
- ASE Collision Repair Technician/Mechanical Electrical  
- ASE L-1 Advanced Engine Performance  
- I-CAR Training Alliance Instructor

Ed Trullinger, Chemistry Instructor  
*Instructional Center, Office 322*  
- B.S. Northwest Missouri State University, 1970  
- M.A. University of Northern Iowa, 1982  
- Additional Work - Viterbo University, Luther College

Ron Utley, Carpentry Instructor (Secondary Programs-Clarke and Central Decatur Schools)  
*Osceola Center, Technical Room*  
- 30+ years experience in residential and commercial construction  
- Iowa Lead Safe Renovator Certification  
- International Code Council Certification  
- United States Army Reserves (Honorable Discharge)

Maureen Weaver, Nursing Instructor  
*Allied Health & Science Center, Office 907*  
- L.P.N. Diploma, Southwestern Community College, 1982  
- A.A.S. R.N. Southwestern Community College, 1990  
- B.S.N. Graceland University, 2002  
- M.Ed. Iowa State University, 2004  
- M.S.N. Walden University, 2014

Dr. Susan White, Nursing Instructor  
*Allied Health & Science Center, Office 906*  
- B.S.N. Graceland College, 1978  
- M.S.E. Drake University, 1988  
- M.S.N. Drake University, 1999  

Clint Williams, Biology Instructor  
*Instructional Center, Office 803*  
- B.S. Peru State College, 1999  
- M.S. University of Nebraska, 2009
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Contact Us

Creston Campus:
1501 West Townline Street
Creston, IA 50801
800.247.4023
641.782.7081
admissions@swcciowa.edu
www.swcciowa.edu
fax 641.782.3312

Admissions Office:
admissions@swcciowa.edu
641.782.1421

Red Oak Center:
2300 North 4th Street
Red Oak, IA 51566
712.623.2541
fax 712.623.4534
redoak@swcciowa.edu

Financial Aid Office:
finaid@swcciowa.edu
641.782.1333

Osceola Center:
2520 College Drive
Osceola, IA 50213
641.342.3531
fax 641.342.3627
osceola@swcciowa.edu

www.swcciowa.edu