



SOUTHEASTERN

COMMUNITY COLLEGE

Credit Course Catalog
2016-2017

Southeastern Community College

2016-2017 Course Catalog

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SCC Campus Information

■ SCC West Burlington Campus

1500 West Agency Road
P.O. Box 180
West Burlington, IA 52655-0180
(319) 208-5000
Fax (319) 752-4957

■ SCC Keokuk Campus

335 Messenger Road
P.O. Box 6007
Keokuk, IA 52632-6007
(319) 313-1924
Fax (319) 524-8621

■ SCC Center for Business

River Park Place
610 North 4th Street, Suite 220
Burlington, IA 52601
(319) 208-5375
Fax (319) 752-3407

■ SCC Mount Pleasant Center

200 North Main Street
Mount Pleasant, IA 52641
(319) 385-8012

MISSION:

Southeastern Community College provides accessible, quality programs and services which promote student success and economic vitality.

VISION:

Southeastern Community College, a visionary leader in lifelong learning, embraces diversity, transforms lives, strengthens communities, and inspires individuals to excellence.

VALUES:

Excellence:

We are committed to the highest standards in all aspects of teaching and learning.

Integrity:

We encourage honesty, respect and personal accountability among and between students, staff, and stakeholders.

Stewardship:

We are effective and vigilant stewards of our financial, physical, and human resources.

Continuous Improvement:

We promote evidence-based decisions and systems within a culture of empowerment and teamwork.

Southeastern Community College is accredited by
The Higher Learning Commission.

230 South LaSalle Street, Suite 7-500
Chicago, IL 60604-1411
Phone: (312) 263-0456.
www.ncahlc.org



Southeastern Community College is an Affirmative Action/Equal Opportunity Employer. Southeastern Community College is a publicly supported community college serving the Iowa counties of Merged Area XVI.

The college makes every effort to ensure the accuracy of the content of this catalog but reserves the right to make changes at any time without prior notice. This catalog is for informational purposes and does not constitute a contract.

Published through the Office of Academic Affairs.

Southeastern Community College is accredited by the Iowa Department of Education.

Southeastern Community College is a member of:

- The American Association of Community Colleges
- Association of Community College Trustees
- Iowa Association of Community College Trustees
- Iowa Association of Community College Presidents
- League for Innovation in Community Colleges

2016-2017 Academic Calendar

■ Fall 2016

8/22 Online classes begin (16 Week & 1st 8 Week sessions)
 8/22-23 Faculty Workshops
 8/24 Fall Semester begins (face-to-face classes)
 9/5 Labor Day - No Classes, Office Closed
 9/7 Last Day for 16 Week face-to-face class 100% tuition and Bookstore refund*
 9/19 12 Week online classes begin
 10/14 1st 8 Week online classes end
 10/17 2nd 8 Week online classes begin
 10/19 Mid-Term
 10/21 Workshop/In-service
 11/11 Last day to withdraw from 16 Week classes with a grade of "W"*
 11/23-25 ... Thanksgiving Vacation - No Classes, Office Closed
 12/9 Online classes end (16, 12, & 2nd 8 Week sessions)
 12/16, 19-20 Finals (click here for schedule)
 12/20 Fall Semester ends (face-to-face classes)
 12/21-22... Faculty workshops - Final grades due
 12/21-1/10 Winter Break - No Classes
 12/23-1/2.. College offices closed

■ Spring 2017

1/3 College offices re-open
 1/ 9-10 Faculty Workshops
 1/11 Spring Semester begins (face-to-face classes)
 1/17 Online classes begin (16 Week & 1st 8 Week session)
 1/23 Last day for 1st 8 Week Online courses 100% tuition and Bookstore refund*
 1/24 Last day for 16 Week face-to-face courses 100% tuition and Bookstore refund*
 1/30 Last day for 16 Week Online courses 100% tuition and Bookstore refund*
 2/13 12 Week Online classes begin
 2/17 Professional Development Day - No classes - Offices closed
 2/22 Last day to withdraw from 1st 8 Week Online courses with a grade of "W" *
 2/22 Last day for 12 Week Online courses 100% tuition and Bookstore refund*
 3/8 Mid-Term
 3/10 1st 8 Week Online classes end
 3/13 2nd 8 Week Online classes begin
 3/13-17 Spring Break - No classes - Offices closed
 3/17 Last day for 2nd 8 Week Online courses 100% tuition and Bookstore refund*
 4/4 Last day to withdraw from 16 Week face-to-face and 16 Week Online courses with a grade of "W" *

4/10 Last day to withdraw from 12 Week Online courses with a grade of "W"*
 4/18 Last day to withdraw from 2nd 8 Week Online courses with a grade of "W"*
 5/5 Online classes end (16, 12, & 2nd 8 Week)
 5/8-10 Finals
 5/9 High School Equivalency Graduation Ceremony
 5/10 Spring Semester ends (face-to-face classes)
 5/10 Keokuk Campus Commencement
 5/11 West Burlington Campus Commencement
 5/11-12..... Faculty Workshops - Final grades due

■ Summer 2017

5/29 Memorial Day - No classes - Offices closed
 5/30 1st 8 week online classes begin
 5/30 Summer Session begins (8 week face-to-face classes)
 6/12 2nd 8 week online classes begin
 7/3-4 Independence Day - No classes - Offices closed
 7/10 4 week online classes begin
 7/24 1st 8 week online classes end
 July 26..... Summer Session classes end (8 week face-to-face classes)
 August 6.... 2nd 8 week & 4 week online classes end

*A similar prorated refund schedule and last day to drop will be applied to registrations occurring at times other than they regular registration dates. Click here to see the current Refund/Drop Schedule.

The complete tuition and bookstore refund schedule and last day to drop are available on www.scciowa.edu.

Non-Discrimination Statement

It is the policy of Southeastern Community College not to discriminate on the basis of race, color, national origin, sex, disability, age employment, sexual orientation, gender identity, creed, religion, and actual or potential parental, family or marital status in its programs, activities, or employment practices as required by the Iowa Code §§ 216.6 and 216.9, Titles VI and VII of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d and 2000e), the Equal Pay Act of 1973 (29 U.S.C. § 206, et seq.), Title IX (Educational Amendments, 20 U.S.C. §§ 1681 – 1688), Section 504 (Rehabilitation Act of 1973, 29 U.S.C. § 794), and Title II of the Americans with Disabilities Act (42 U.S.C. § 12101, et seq.).

If you have questions or complaints related to compliance with this policy, please contact Tina Young, Title IX / Equity Coordinator, Southeastern Community College, 1500 W. Agency Road, West Burlington, IA 52655, phone number 319/208-5101, fax 319/208-5005, or the Director of the Office for Civil Rights, U.S. Department of Education, Citigroup Center, 500 W. Madison, Suite 1475, Chicago, IL 60661, phone number 312/730-1560, fax 312/730-1576

Admissions Information

The rules, policies, procedures, and fees described herein may be changed by the authorities of this institution without advance notice and without commitment to such original rules, policies, procedures, and fees deemed necessary to change.

■ General Admissions Policy

The basic expectation of students entering the college credit program is a desire to learn. The college provides educational opportunities for a wide variety of achievement levels and has established realistic entrance standards for each level. These standards may include mandatory placement.

■ Non-Discrimination Statement

It is the policy of Southeastern Community College not to discriminate on the basis of race, color, national origin, sex, disability, age employment, sexual orientation, gender identity, creed, religion, and actual or potential parental, family or marital status in its programs, activities, or employment practices as required by the Iowa Code §§ 216.6 and 216.9, Titles VI and VII of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d and 2000e), the Equal Pay Act of 1973 (29 U.S.C. § 206, et seq.), Title IX (Educational Amendments, 20 U.S.C. §§ 1681 – 1688), Section 504 (Rehabilitation Act of 1973, 29 U.S.C. § 794), and Title II of the Americans with Disabilities Act (42 U.S.C. § 12101, et seq.).

If you have questions or complaints related to compliance with this policy, please contact Human Resources Director, Southeastern Community College, 1500 W. Agency Road, West Burlington, IA 52655, phone number (319) 208-5063, fax (319) 208-5006, or the Director of the Office for Civil Rights, U.S. Department of Education, Citigroup Center, 500 W. Madison, Suite 1475, Chicago, IL 60661, phone number (312) 730-1560, fax (312) 730-1576.

■ Students with Disabilities

It is the policy of SCC to comply with the access provisions of the state and federal civil rights legislation for persons with disabilities. Support services are provided to students with disabilities to ensure equal access in reaching their academic goals. The Disability Coordinator will review and grant requests for reasonable accommodations. The Disability Coordinator will meet with the student and work in a partnership with the student to coordinate services to develop an individual plan for accommodations in all education, activities, services and practices. Each individual's needs and abilities are evaluated in accordance with ADA. A student needing accommodations should register with SCC Disability Services and speak to the Disability Coordinator in the Student Success Center, room 513. For additional information, contact the Disability Coordinator at (319) 208-5167 or (319) 208-5155.

■ Mandatory Placement

Southeastern Community College has adopted mandatory placement standards for English, reading, and mathematics. All full-time and all part-time degree-seeking students must complete the Accuplacer, ALEKS, COMPASS or ACT and e-Write or WritePlacer before enrolling in classes. Assessment scores are valid for two years provided the student has been continuously enrolled. Students with scores older than two years will need to test again. Students with scores below an established level will be required to enroll in developmental course(s) in their first term of enrollment. Several career education programs also have minimum standards for admission and/or acceptance.

Program and course admission standards are available in the Enrollment Services Office.

■ Specific Admissions Requirements Arts and Sciences/Career Education Curricula

The minimum requirements for admission as a regular student to programs in either the Arts and Sciences Division or Career, Technical and Health Division shall be graduation from an approved secondary school, its equivalent (determining equivalency of a secondary school diploma shall be consistent with the practice employed by the three state institutions for higher education in Iowa) or demonstrated interest, aptitude, and the ability to benefit from coursework offered by the curricula.

■ Health Career Programs

Students entering health career programs are expected to maintain a high standard of ethical and professional behavior throughout their courses of study. Characteristics of honesty, integrity, commitment, safety and confidentiality are essential for program success. It is also expected that students will maintain regular attendance in classroom and clinical assignments.

Students must maintain a high degree of professional behavior with patients and families during clinical assignments. All students will be required to pass a mandatory back ground check.

In addition to meeting the admissions requirements for the college, students entering health career programs must meet additional program admissions requirements. All health career programs require students to earn a grade of "C" (2.0) or above in all coursework within the program for which they are applying. In addition, students must have standardized placement scores completed within 24 months prior to the date of enrollment.

■ Admissions/Enrollment Prior to High School Graduation

Through agreements with area high schools, high school students who meet requirements as outlined in Senior Year Plus legislation have the opportunity to take college courses prior to high school graduation. Eligible courses are outlined in agreements between each area high school and SCC.

Upon completion of the enrolled course(s), students will earn both high school and college credit. Postsecondary credits earned are transferable to other colleges and universities depending on degree requirements at that institution. Contact a high school counselor for additional information on these opportunities.

Jump Start Career & Technical and/or Arts & Sciences

SCC, in cooperation with area high schools, can help high school students get a jump start on college and career and increase skill levels for employment. These programs are taught by SCC-approved instructors and offered at various locations around the area. Both high school and

college credit are awarded for every class. High school counselors have complete listings of these offerings through their districts.

Application Procedures - Credit Courses

Educational Curricula for the Disabled or Disadvantaged

The admissions requirements for persons who are disabled or disadvantaged to an extent which prevents them from succeeding in regular programs shall be based on analysis, evaluation and screening. Each individual's needs, abilities, and interests are evaluated in accordance with procedures established by appropriate divisions of the Iowa Department of Education and this institution's program of affirmative action.

■ **Specific Procedures for Students Applying for Admission**

Applications for Admission are accepted at any time and may be submitted online at www.sccowa.edu. Application forms can also be distributed or mailed from the Enrollment Services Office. Enrollment is limited in certain courses and programs. In order to receive full consideration, students are encouraged to have all entrance requirements completed and available to the Enrollment Services Office at the earliest possible date. Application for Admission and transcripts of all previously earned academic credit (high school, high school equivalency or college) to Enrollment Services. Students are required to complete a new student orientation, which is available online, and provide placement assessments prior to enrollment. Students must have a current English, math, reading, and writing assessments on file with Enrollment Services Office. The college accepts Accuplacer, ALEKS, COMPASS, or ACT scores that are within two years of enrollment.

An admissions committee may evaluate an application to determine admission to particular programs. Students are required to complete a new student orientation, which is available online, prior to enrollment. Career and technical programs may also require participation in a program orientation prior to enrollment.

Students must have a current Accuplacer and Aleks score or ACT or COMPASS and e-Write score (within the last two years) report on file with the Enrollment Services Office. The Accuplacer, Aleks, ACT or COMPASS and e-Write is used for advising, mandatory course placement, and admission into certain career education programs.

■ **Transfer Students**

Students who wish to transfer from another college are eligible to apply for admission. Students transferring to Southeastern Community College from other institutions will have their credits evaluated on an individual basis. All transfer students are advised to consult with the Registrar's Office well in advance of the beginning of each term so that transfer status may be established.

■ **International Students (F-1 Status)**

International students who apply from abroad or who would like to transfer from other institutions in the United States to Southeastern Community College must have a high school diploma or the equivalent. Students must submit an Application for Admission, Accuplacer ESL, TOEFL or COMPASS-ESL score, and high school/college transcripts. Students must also provide financial documentation showing proof of funds available to cover the cost of tuition,

books, room, board, etc. SCC is authorized under Federal law to enroll nonimmigrant students. For more information, please contact the Enrollment Services Office at (319) 752-2731, ext. 5017.

■ **Non-Native Speakers**

All applicants to Southeastern Community College whose native language is not English are required to submit scores from the Test of English as a Foreign Language (TOEFL) or Accuplacer-ESL or COMPASS-ESL with their Application for Admission and supporting academic documents. Students must demonstrate proficiency in the English language by obtaining a satisfactory score on the Accuplacer-ESL or TOEFL/COMPASS ESL. For more information, please contact the Enrollment Services Office at (319) 752-2731, x5017.

■ **Course Offerings**

If there is sufficient demand, courses may be offered more frequently than announced. Insufficient demand or unforeseen staffing problems may result in the cancellation of announced offerings. Southeastern Community College reserves the right to alter the course offerings and/or course content without further notice. Students are advised to consult the schedule of classes available in Enrollment Services.

Graduation Requirements

■ General Information

A student who intends to graduate from Southeastern Community College must file a Request to Graduate petition. This petition should be completed when registering for the last anticipated semester of classes. Petition forms are available in the Registrar's office and on the SCC website.

Degree, diploma, and certificate requirements stated in the Southeastern Community College catalog at the time of a student's initial enrollment will remain in effect for that student until graduation. If changes occur in graduation requirements subsequent to initial enrollment, the student may elect to graduate under the most recent degree or diploma requirements. The ability to graduate under the requirements of an older catalog is subject to a five-year limitation. The final determination of graduation requirements rests with the Registrar.

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 an

Enrollment Specialist will attempt to help the student make wise decisions, the final responsibility for meeting the requirements for graduation rests with the student.

Graduation from Southeastern Community College shall be certified by the issuance of a degree, diploma, or certificate. No student shall be issued an award who has not earned a cumulative grade point average of at least 2.00 at SCC.

If a student receives information from an Enrollment Specialist which may have an impact upon the student's graduation requirements or application of credits toward graduation, the student is advised to secure the information in writing. It is further advised that this documentation be retained by the student.

■ Commencement

Commencement is an integral part of the student's experience in college. The commencement is held at the conclusion of the spring semester. Any student of the college who has completed all the necessary requirements for a degree, diploma, or a certificate requiring 15 or more semester hours is eligible to participate. Additionally, any student of Southeastern Community College is eligible to participate in commencement if there is a clear indication made to the Registrar by the student at the beginning of the spring semester that necessary requirements will be completed prior to the beginning of the next fall semester.

■ Graduation with Honors

Qualifying students are recognized as meeting the requirements of Graduation with Honors at commencement ceremonies. To qualify for this recognition, the student's cumulative grade point average must be 3.75 or above as of the end of the fall semester. A minimum of 15 semester hours must have been completed at Southeastern Community College.

A student with a GPA below 3.75, but above a 3.50, may qualify at the end of the spring semester if he/she receives spring grades which are high enough to raise his/her GPA to 3.75 or above at the end of the spring semester. It is the responsibility of the student to notify the registrar of this possible last-minute designation.

■ Assessment Philosophy

Assessing student academic achievement at Southeastern Community College is a process of documenting student learning within the domain of general education requirements and within career education programs that go beyond traditional course grades. The purpose of assessment is to promote and document continuous educational improvement throughout the institution.

The data gathered will be used to make adjustments within courses and/or programs when deemed necessary.

Assessment data will also provide valuable information for use in the college's strategic planning and program review processes. The assessment of students' knowledge of course content and general education and career education objectives

will also allow the college to become more articulate in its communication efforts with internal and external constituents regarding how well the college is accomplishing its mission and goals/objectives.

■ General Education Statement

The goal of Southeastern Community College is to instill within its degree graduates a body of knowledge, skills, and attitudes upon which they can build to be contributing members of society. To accomplish this, associate degree requirements are established which meet a diversity of interests associated with comprehensive community college students. Southeastern Community College requires that the associate of arts (AA) degree and the associate of science (AS) degree includes courses in the following areas:

1. Communication
2. Social Science
3. Humanities
4. Mathematics
5. Science
6. Cultural Awareness

SCC is committed to ensuring that students graduating with associate degrees have attained skills in the following areas:

- Communication
- Critical Thinking
- Scientific, Quantitative, and Qualitative Reasoning
- Responsible Citizenship
- Awareness and appreciation of cultural diversity

■ General Education Group

Requirements

Communication

ENG English; SPC Speech

Humanities

ART Art; LIT Literature; Foreign Language — FLF French, FLG German, FLS Spanish; HIS History; HUM Humanities; MUS, MUA Music; PHI Philosophy; DRA Drama; REL Religion

Social Sciences

ECN Economics; GEO Geography; HIS History; POL Political Science; PSY Psychology; SOC Sociology

Math and Science

MAT Mathematics; BIO Biology; CHM Chemistry; ENV Environmental Science; PHY Physics; PHS Physical Science

Cultural Awareness

ART Art; DRA Drama; ENG English; FLS Foreign Language Spanish; HIS History; HUM Humanities; MUS Music; PHI Philosophy; REL Religion; SOC Sociology

Credit earned toward satisfaction of one group requirement may not be applied toward satisfaction of a second group requirement.

■ Academic Awards

Requirements for each of the college's curriculum must be satisfactorily completed prior to an individual being eligible to receive an award from Southeastern Community College. One of the following will be awarded to a student who completes the specified requirements:

- Associate of Arts degree
- Associate of Science degree
- Associate of Applied Science degree
- Diploma
- Certificate

■ Associate of Arts Degree

The associate of arts degree is primarily intended for those students who plan to transfer to a four-year college or university. A transfer student should always consult with the four-year institution to determine application of particular courses toward his/her degree objectives.

All candidates for the Associate of Arts Degree must meet the following requirements:

1. Earn a minimum of 15 of the last 20 semester hours of credit in resident classes at Southeastern Community College.
2. Earn a minimum cumulative grade point average (GPA) of 2.00 at SCC.
- 3a. All general education group requirements necessary for the associate of arts degree must be selected from transfer course offerings.
- 3b. Each of the following minimum general education group requirements must be met:
Communication (ENG-105, ENG-106, SPC-101 or SPC-112)..... 9 sem. hrs.
*Humanities..... 12 sem. hrs.
*Social Sciences..... 12 sem. hrs.
*Science & Mathematics.. 10 sem. hrs.
Cultural Awareness..... 3 sem. hrs.
*Electives..... 14 sem. hrs.
Minimum Total..... 60 sem. hrs.

** Select courses from at least two different disciplines in this area. In the science and mathematics group, at least one lab science and one mathematics course must be taken.*

■ Associate of Science Degree

The associate of science degree is primarily intended for those students who plan to transfer to a four-year college or university. A transfer student should consult with the four-year institution to determine application of particular courses toward his/her degree objectives.

All candidates for the Associate of Science Degree must meet the following requirements:

1. Earn a minimum of 15 of the last 20 semester hours of credit in resident classes at Southeastern Community College.
2. Earn a minimum cumulative grade point average (GPA) of 2.00 at SCC.
- 3a. All general education group requirements and specialty area requirements necessary for the associate of science degree must be selected from transfer course offering.
- 3b. Each of the following minimum general education group requirements must be met:
Communication (ENG-105, ENG-106, SPC-101 or SPC-112)..... 9 sem. hrs..
*Humanities..... 6 sem. hrs.
*Social Sciences..... 6 sem. hrs.
*Science & Mathematics.. 21 sem. hrs.
Cultural Awareness..... 3 sem. hrs.
*Electives..... 15 sem. hrs.
Minimum Total..... 60 sem. hrs.

** Select courses from at least two different disciplines in this area.*

■ Associate of Applied Science Degree

The associate of applied science degree is intended for those students who are enrolled in a two-year career education program.

All candidates for the Associate of Applied Science Degree must meet the following requirements:

1. Earn a minimum of 15 of the last 20 semester hours of credit in resident classes at Southeastern Community College.
2. Earn a minimum cumulative grade point average (GPA) of 2.00 in the AAS degree curriculum at SCC.
3. General education courses required for the associate of applied science degree must be selected from courses listed in the approved program curriculum. A minimum of 15 semester hours of general education requirements must be taken with at least one course from each of the three areas: Communication; Social Sciences and/or Humanities; Mathematics and/or Science.
4. Satisfactory completion of all core and general education requirements as specified for the curriculum selected. These requirements are stated in the career education section of this catalog. Core and general education requirements of the individual career education curriculums vary in terms of the credit hour requirements. Therefore, requirements should be evaluated carefully by the student. Normally, the length of all career education curricula leading to an associate of applied science degree is a minimum of four semesters.

■ Diploma

The diploma shall be issued to a person who has graduated from an approved vocational program which does not culminate in a degree or certificate.

All candidates for a Diploma must meet the following requirements:

1. Earn a minimum of ten of the last 13 semester hours of credit in resident classes at Southeastern Community College.
2. Earn a minimum cumulative grade point average (GPA) of 2.00 at SCC in the diploma curriculum.
3. General education courses and elective credit required for a diploma are listed in the approved curriculum for that diploma.
4. Satisfactory completion of all general education and core requirements as specified for the diploma program. These requirements are stated in the career education section of this catalog. Requirements of diploma programs vary in terms of length and credit hours.

■ Certificate

A certificate of completion may be issued to a student who has satisfactorily completed a course of study prescribed by the institution other than one that is intended to result in the awarding of a diploma or degree.

All candidates for a Certificate must meet the following requirements:

1. All requirements must be met through earned SCC credits or through approved action by the registrar.
2. Earn a minimum cumulative grade point average (GPA) of 2.00 in the certificate curriculum at SCC.
3. General education courses, if required, are listed in the approved curriculum for that certificate.
4. Satisfactory completion of all core, general education and/or elective requirements as specified for the certificate program. These requirements are stated in the program section of the college catalog. Requirements of certificate programs vary in terms of length and credit hours.

Arts and Sciences (College Transfer)

The arts and sciences program provides courses of study which will readily transfer to most colleges and universities. Students planning to earn a baccalaureate degree may begin coursework at Southeastern Community College and complete the general education requirements for most majors with the completion of an SCC Associate of Arts degree.

Iowa community colleges and Iowa regent universities (University of Iowa, University of Northern Iowa, and Iowa State University) have developed an articulation agreement to assist in the transfer process. SCC also has articulation agreements with other colleges and universities. Students should consult with an SCC enrollment specialist to determine the transfer of coursework since many majors require specific classes. Students may also be referred to faculty for questions regarding specific majors.

Students can start classes at SCC and transfer for a degree in any of the following majors:

Accounting
Agriculture
Art
Athletic Training/Exercise Science
Biological Science
Business
Chemistry
Chiropractic
Communication
Computer Science
Criminal Justice/Law Enforcement
Dentistry
Early Childhood
Elementary Education
Engineering
English
Graphic Communication/Design
Industrial/Engineering Technology
Law
Mathematics
Medicine
Music
Nursing Home and Health Services Administration
Nutrition/Dietetics
Optometry
Pharmacy
Physical Education
Physical Therapy
Psychology
Secondary Education
Social Work
Veterinary Medicine

■ Steps to Assist in the Transfer of Credit

Students who intend to transfer credits earned at SCC toward degree requirements at another college are urged to observe the following steps:

Students should:

1. **THINK** carefully about personal interests and abilities. Students will then be in a better position to make decisions regarding educational goals, and SCC will be able to better assist the student in accomplishing those goals.
2. **MEET** with an SCC enrollment specialist to discuss educational plans and select courses for each term.
3. **CONTACT** the transfer college to obtain information necessary for a successful transfer. Students should be aware that many majors require specific coursework at SCC.
4. **DISCUSS** any change in educational plans with an SCC enrollment specialist. Never rely on rumors about what will and will not transfer. Always visit with an enrollment specialist or the transfer institution and get the facts.

To be assured of an ideal transfer, it is very important for students to know both their chosen majors and transfer colleges as soon as possible. Most transfer colleges provide information on their websites for transfer students.

To see how an SCC class transfers, go to the SCC website www.scciowa.edu.

If your intended major is not listed, contact Enrollment Services for suggested coursework.

Educational Programs Available at SCC

■ Degree and Certificate Services and Programs

Associate of Arts (AA) or Associate of Science (AS) Transfer Majors

College Transfer Options

Criminal Justice (AA)
Elementary Education (AA)
Fine Arts (AA)
Graphic Design (AA)
Athletic Training (AS)
Forensic Chemistry (AS)
Biology (AS)

AAS, Diploma, Certificate

Accounting
Administrative Assistant
 Administrative Assistant-Legal
 Administrative Assistant-Medical
Agriculture Management
Animation for Television, Film, and New Media
Automobile Collision Repair
Automotive Technology
 Management Option
Biomedical Electronics Technician
Business Administration
Computer Aided Design Technology
Construction Technology
 Construction Management
Criminal Justice
Electronics Technology
Emergency Medical Services
Industrial Maintenance Technology
 Electrical Maintenance Technician
 Mechanical Maintenance Technician
Information Technology
 Network Administration & Cyber Security
 Web Design & Development
Interactive & Social Media Marketing
Medical Assistant
Medical Coding and Billing
Medical Scribe
Nursing
 Associate Degree
 Practical Nursing
Respiratory Care
Skilled Trades
Welding

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at www.scciowa.edu

Graduation Requirements for Associate of Arts Degree

To graduate, a student must have a 2.00 grade point average or above and have successfully completed sixty (60) semester hours of credit in courses designated for transfer. In addition, every student must meet the following requirements:

	Semester Hours
The College Experience	1
The College Experience: SDV-108	1
Communications	9
Composition: ENG- 105 AND 106	6
Speech: SPC- 101 OR 112	3
Humanities - Select from at least 2 different departments	9
Art: ART- 101, 109, 120, 123, 133, 134, 138, 143, 144, 154, 157, 173, 174, 184, 203, 204, 208, 922, 928	
Drama: DRA- 101, 110, 130, 141, 142, 145, 165	
English: ENG- 221, 929	
History & World Civ: HIS- 131, 132, 151, 152, 211, 231, 251, 257, 266, 268, 271	
Humanities: HUM- 114, 145, 287, 290	
Journalism: JOU- 120, 121	
Literature: LIT- 101, 105, 120, 121, 122, 125, 131, 150, 151, 184, 204, 209	
Mass Media Studies: MMS- 111	
Music: MUA- 101, 104, 106, 108, 109, 120 thru 127, 143, 146, 170, 173, 180, 183	
MUS- 100, 102, 120, 121, 135, 136, 140, 150, 162, 204, 220, 221, 235, 236	
Philosophy: PHI- 101, 105, 110, 122	
Religion: REL- 101	
Spanish: FLS- 129, 141, 142, 231, 232, 922	
Speech: SPC- 115	
Social Science - Select from at least 2 different departments	12
Economics: ECN- 120, 130	
Geography: GEO- 121, 141, 161, 922	
History & World Civ: HIS- 131, 132, 151, 152, 211, 231, 251, 257, 266, 268, 271	
Political Science: POL- 110, 111, 112	
Psychology: PSY- 102, 111, 121, 211, 226, 227, 228, 241, 251	
Sociology: SOC- 110, 114, 115, 120, 136, 160, 161, 186, 207, 212, 220, 221, 230, 240, 251, 270, 922	
Math & Science - Must include one math and one laboratory science course	10
Mathematics: MAT- 110, 112, 113, 127, 128, 140, 149, 156, 165, 170, 210, 216, 219, 227	
Lab Science: BIO- 105, 112, 113, 138, 163, 168, 173, 186, 248, 252; CHM- 122, 165, 175, 263, 273;	
ENV- 111; PHS- 120, 151; PHY- 106, 160, 161, 212, 222; SCI- 123	
Non-Lab Science: BIO- 151, 277; PHS- 165, 185; SCI- 922, 928	
Cultural Awareness - Minimum of 3 hours	3
ART- 101, 203, 204, 208; DRA- 101, 110, 130; ENG- 221; FLS- 141, 142; HIS- 211, 257;	
HUM- 114; LIT- 120, 121, 122, 131, 209; MUS- 100, 204; PHI- 101, 105, 122; REL- 101; SOC- 186, 212, 851;	
SPC- 120	
Electives	16
All transfer level courses may be used here including courses listed above (if additional 14 are taken beyond requirements). Students should plan their elective courses according to their college major if they are planning to transfer on for a four year degree. Information on suggested coursework is available in the Enrollment Services office.	
Total	60

Associate of Arts Degree Worksheet

Student Name: _____

Date: _____

I. COURSE REQUIREMENTS

Course Name / #	Hrs.
-----------------	------

A. The College Experience (1 semester hour)

SDV-108 The College Experience _____

B. Communications (9 semester hours)

ENG-105 Composition I (C- or better) _____

ENG-106 Composition II _____

SPC-101 or SPC-112 _____

Total _____

C. Humanities (minimum of 9 semester hours)*

Select from at least 2 of the following subject areas:
art, music, philosophy, literature, foreign language,
history**, and theatre.

Total _____

D. Social Science (minimum of 12 semester hours)*

Select from at least 2 of the following subject areas:
History**, political science, geography, sociology,
psychology, and economics.

Total _____

E. Science/Math (minimum of 10 semester hours)*

Must include both science and math. Must include 1 lab science.

Science

Total _____

Math

Total _____

F. Cultural Awareness

Three (3) additional hours from specific courses listed under graduation requirements for Cultural Awareness.

Total _____

G. Electives (maximum of 16 semester hours)

Total _____

■ Total Hours

- 60 hours are required to graduate •

The College Experience _____

Communications _____

Humanities _____

Social Science _____

Science/Math _____

Electives _____

Total _____

II. OTHER REQUIREMENTS

Residency Requirement

(15 of last 20 hours must be completed at SCC)

Requirement Met _____

GPA Requirement

(2.0 required for graduation)

Requirement Met _____

*Excess hours in these categories will be in category F (elective hours).

**History courses may count as either Social Science or Humanities credit.

Criminal Justice Transfer Major (AA)

West Burlington and Keokuk Campuses

Criminal Justice Transfer Major

Sample curriculum - Associate of Arts Degree Requirements

Program Contact:

Cindy Shireman
 Professor - Criminal Justice
 (319) 208-5000 x5232 or x1998
 Email: cshireman@scciowa.edu
 BA, University of Iowa
 MA, University of Iowa
 MS, Kaplan University

For current information, please visit our website at www.scciowa.edu.

Fall Semester I		Lec.	Lab.	Credit
ENG-105	Composition I	3	0	3
SOC-110	Introduction to Sociology	3	0	3
MAT-110	Math for Liberal Arts <i>or</i>	3	0	3
MAT-156	Statistics	3	0	3
CRJ-100	Introduction to Criminal Justice	3	0	3
CRJ-120	Introduction to Corrections	3	0	3
		15	0	15

Spring Semester I		Lec.	Lab.	Credit
ENG-106	Composition II	3	0	3
PSY-111	Introduction to Psychology	3	0	3
SOC-240	Criminology	3	0	3
CRJ-132	Criminal Law	3	0	3
ART-101	Art Appreciation <i>or</i>	3	0	3
ART-133	Drawing I	3	0	3
		15	0	15

Fall Semester II		Lec.	Lab.	Credit
SPC-112	Public Speaking	3	0	3
HUM-114	Multicultural Perspectives	3	0	3
PSY-241	Abnormal Psychology	3	0	3
MUS-204	History of Rock and Roll <i>or</i>	3	0	3
DRA-110	Introduction to Film	3	0	3
SOC-230	Juvenile Delinquency	3	0	3
PHS-151	Introduction to Astronomy <i>or</i>	3	0	3
PHS-165	Introduction to Meteorology <i>or</i>	3	0	3
PHS-185	Introduction to Earth Science	3	0	3
		18	0	18

Spring Semester II		Lec.	Lab.	Credit
POL-111	American National Government <i>or</i>	3	0	3
POL-112	American State and Local Government	3	0	3
PHI-105	Introduction to Ethics	3	0	3
HIS-151	US History to 1865 <i>or</i>	3	0	3
HIS-152	US History since 1865	3	0	3
SCI-123	Forensic Science <i>or</i>	3	0	3
BIO-105	Introduction to Biology <i>or</i>	3	0	3
PHS-120	Exploring Physical Science	3	2	4
SOC-115	Social Problems	3	0	3
		15	2	16

Program Total64

SCC has established 2+2 agreements with four-year institutions for this transfer major. Depending upon where you plan to transfer, your SCC coursework may differ from the example above. Contact your enrollment specialist to learn which courses you should take.

Elementary Education Transfer Major (AA)

Program Contact:

Karen Cahill

Professor - English

(319) 208-5000 x5242

Email: kcahill@scciowa.edu

BA, University of Iowa

MA, Appalachian State University

Additional study: University of Iowa, Drake University

For current information, please visit our website at www.scciowa.edu.

West Burlington and Keokuk Campuses

Elementary Education Transfer Major

Sample curriculum - Associate of Arts Degree Requirements

Fall Semester I	Lec.	Lab.	Credit
LIT-101 Introduction to Literature	3	0	3
EDU-210 Foundations of Education	3	0	3
EDU-920 Field Experience	0	4	2
ENG-105 Composition I	3	0	3
MAT-112 Math for Elementary Teachers I	3	0	3
	12	6	14

Spring Semester I

EDU-247 Teaching Exceptional Learners	3	1	3.5
ENG-106 Composition II	3	0	3
MAT-113 Math for Elementary Teachers II	3	0	3
PSY-111 Introduction to Psychology	3	0	3
SPC-112 Public Speaking	3	0	3
	15	1	15.5

Fall Semester II

EDU-240 Educational Psychology	3	0	3
HIS-151 Unites States History to 1877	3	0	3
HUM-114 Multicultural Perspectives	3	0	3
MUS-204 History of Rock and Roll <i>or</i>	3	0	3
DRA-110 Introduction to Film	3	0	3
EDU-235 Children's Literature	3	0	3
	15	0	15

Spring Semester II

BIO-105 Introductory Biology	3	2	4
ART-101 Art Appreciation	3	0	3
SOC-110 Introduction to Sociology	3	0	3
PSY-121 Developmental Psychology	3	0	3
POL-111 American National Government	3	0	3
	14	2	16

Program Total 60.5

SCC has established 2+2 agreements with four-year institutions for this transfer major. Depending upon where you plan to transfer, your SCC coursework may differ from the example above. Contact your enrollment specialist to learn which courses you should take.

Fine Arts Transfer Major (AA)

West Burlington and Keokuk Campuses

Fine Arts Transfer Major

Sample curriculum - Associate of Arts Degree Requirements

Note: some online coursework may be required for those courses not offered on campus

Fall Semester I		Lec.	Lab.	Credit
ENG-105	Composition I	3	0	3
DRA-110	Introduction to Film	3	0	3
DRA-101	Introduction to Theatre	3	0	3
LIT-101	Introduction to Literature	3	0	3
ART-133	Drawing I	2	2	3
		<u>14</u>	<u>2</u>	<u>15</u>
Spring Semester I				
DRA-141	Theatre and Speech Participation I	0	2	1
ENG-106	Composition II	3	0	3
MAT-110	Math for Liberal Arts	3	0	3
HUM-114	Multicultural Perspectives	3	0	3
PSY-111	Introduction to Psychology	3	0	3
HIS-151	US History to 1877 <i>or</i>	3	0	3
HIS-152	US History since 1877 <i>or</i>	3	0	3
HIS-211	Modern Asian History	3	0	3
		<u>15</u>	<u>2</u>	<u>16</u>
Fall Semester II				
BIO-105	Introductory Biology	3	2	4
DRA-165	Stagecraft	2	2	3
SOC-110	Introduction to Sociology	3	0	3
ART-203	Art History I	3	0	3
LIT-209	Forms of Literature: Film Adaptation	3	0	3
		<u>14</u>	<u>4</u>	<u>16</u>
Spring Semester II				
MUS-100	Music Appreciation	3	0	3
ENG-221	Creative Writing	3	0	3
PHS-165	Introduction to Meteorology	3	0	3
POL-110	Introduction to Political Science <i>or</i>	3	0	3
POL-111	American National Government	3	0	3
SPC-112	Public Speaking	3	0	3
		<u>15</u>	<u>0</u>	<u>15</u>

Program Total 62

SCC has established 2+2 agreements with four-year institutions for this transfer major. Depending upon where you plan to transfer, your SCC coursework may differ from the example above. Contact your enrollment specialist to learn which courses you should take.

Program Contact:

Leigh Pirtle

Professor - Music

(319) 208-5000 x5245

Email: lpirtle@scciowa.edu

BM, University of Iowa

MA, University of Iowa

Additional study: Drake University

For current information, please visit our website at www.scciowa.edu.

Graphic Design Transfer Major (AA)

Instructor and Staff

Carlene Woodside

Professor - Interactive and Social

Media Marketing

(319) 208-5000 x5201

Email: cwoodside@scciowa.edu

AAS, Carl Sandburg College

BS, Western Illinois University

MBA, Western Illinois University

For current information, please visit our website at www.scciowa.edu.

West Burlington Campus

Graphic Design Transfer Major

Sample curriculum - Associate of Arts Degree Requirements

Fall Semester I		Lec	Lab	Credit
ART-120	2-D Design	2	2	3
ENG-105	Composition I	3	0	3
MAT-110	Math for Liberal Arts <i>or</i>	3	0	3
MAT-156	Statistics	3	0	3
MUS-100	Music Appreciation <i>or</i>	3	0	3
MUS-204	History of Rock & Roll	3	0	3
GRA-137	Digital Design	2	2	3
		<u>13</u>	<u>4</u>	<u>15</u>
Spring Semester I				
ART-101	Art Appreciation <i>or</i>			
ART-203	Art History	3	0	3
ENG-106	Composition II	3	0	3
PSY-111	Intro to Psychology	3	0	3
HUM-287	Leadership Development <i>or</i>	3	0	3
HUM-114	Multicultural Perspectives	3	0	3
SOC-115	Social Problems <i>or</i>	3	0	3
SOC-120	Marriage & Family	3	0	3
		<u>15</u>	<u>0</u>	<u>15</u>
Fall Semester II				
SPC-112	Public Speaking	3	0	3
ART-133	Drawing I	2	2	3
ENV-111	Environmental Science	3	2	4
GRA-140	Digital Imaging	2	2	3
GRA-173	Typography	3	0	3
		<u>13</u>	<u>6</u>	<u>16</u>
Spring Semester II				
BIO-105	Introductory Biology	3	2	4
HIS-131	World Civilization <i>or</i>	3	0	3
HIS-211	Modern Asian History	3	0	3
POL-110	Intro to Political Science <i>or</i>	3	0	3
POL-112	American State & Local Government	3	0	3
GRA-127	Illustrator I	2	2	3
GRA-116	Digital Preflight Production	2	2	3
		<u>13</u>	<u>6</u>	<u>16</u>

Program Total 62

SCC has established 2+2 agreements with four-year institutions for this transfer major. Depending upon where you plan to transfer, your SCC coursework may differ from the example above. Contact your enrollment specialist to learn which courses you should take.

Graduation Requirements for Associate of Science Degree

To graduate, a student must have a 2.00 grade point average or above and have successfully completed sixty (60) semester hours of credit in courses designated for transfer. In addition, every student must meet the following requirements:

	Semester Hours
The College Experience	1
The College Experience: SDV-108	1
Communications	9
Composition: ENG- 105 AND 106	6
Speech: SPC- 101 OR 112	3
Humanities - Select from at least 2 different departments	6
Art: ART- 101, 109, 120, 123, 133, 134, 138, 143, 144, 154, 157, 173, 174, 184, 203, 204, 208, 922, 928	
Drama: DRA- 101, 110, 130, 141, 142, 145	
English: ENG- 221, 929	
History & World Civ: HIS- 131, 132, 151, 152, 211, 231, 251, 257, 266, 268, 271	
Humanities: HUM- 114, 145, 287, 290	
Journalism: JOU- 120, 121	
Literature: LIT- 101, 105, 120, 121, 122, 125, 131, 150, 151, 184, 204, 209	
Mass Media Studies: MMS- 111	
Music: MUA- 101, 104, 106, 108, 109, 120 thru 127, 143, 146, 170, 173, 180, 183	
MUS- 100, 102, 120, 121, 135, 136, 140, 150, 162, 204, 220, 221, 235, 236	
Philosophy: PHI- 101, 105, 110, 122	
Religion: REL- 101	
Spanish: FLS- 141, 142, 231, 232, 922	
Speech: SPC- 115	
Social Science - Select from at least 2 different departments	6
Economics: ECN- 120, 130	
Geography: GEO- 121, 141, 161, 922	
History & World Civ: HIS- 131, 132, 151, 152, 211, 231, 251, 257, 266, 268, 271	
Political Science: POL- 110, 111, 112	
Psychology: PSY- 102, 111, 121, 211, 226, 227, 228, 241, 251	
Sociology: SOC- 110, 114, 115, 120, 136, 160, 161, 186, 207, 220, 221, 230, 240, 270, 851, 922	
Math & Science - Must include one math and one laboratory science course	20
Mathematics: MAT- 127, 128, 140, 149, 156, 165, 170, 210, 216, 219, 227	
Lab Science: BIO- 112, 113, 138, 163, 168, 173, 186, 248, 252; CHM- 165, 175, 263, 273;	
PHY- 160, 161, 212, 222	
Cultural Awareness - Minimum of 3 hours	3
ART- 101, 203, 204, 208; DRA- 101, 110, 130; ENG- 221; FLS- 141, 142; HIS- 211, 257;	
HUM- 114; LIT- 120, 121, 122, 131, 209; MUS- 100, 204; PHI- 101, 105, 122; REL- 101;	
SOC- 186, 212, 851; REL- 120	
Electives	15
All transfer level courses may be used here including courses listed above (if additional 15 are taken beyond requirements). Students should plan their elective courses according to their college major if they are planning to transfer on for a four year degree. Information on suggested coursework is available in the Enrollment Services office.	
Total	60

Associate of Science Degree Worksheet

Student Name: _____

Date: _____

I. COURSE REQUIREMENTS

Course Name / #	Hrs.
-----------------	------

A. The College Experience (1 semester hour)

SDV-108 The College Experience _____

B. Communications (9 semester hours)

ENG-105 Composition I (C- or better) _____

ENG-106 Composition II _____

SPC-101 or SPC-112 _____

Total _____

C. Humanities (minimum of 6 semester hours)*

Select from at least 2 of the following subject areas:
art, music, philosophy, literature, English, foreign language,
history**, and theatre.

Total _____

D. Social Science (minimum of 6 semester hours)*

Select from at least 2 of the following subject areas:
History**, political science, geography, sociology,
psychology, and economics.

Total _____

E. Science/Math (minimum of 20 semester hours)*

Must include both science and math. Must include 1 lab science.

Science

Total _____

Math

Total _____

E. Cultural Awareness

Three (3) additional hours from specific courses listed under graduation requirements for Cultural Awareness.

Total _____

F. Electives (15 semester hours)

Total _____

■ Total Hours

• 60 hours are required to graduate •

The College Experience _____

Communications _____

Humanities _____

Social Science _____

Science/Math _____

Electives _____

Total _____

II. OTHER REQUIREMENTS

Residency Requirement

(15 of last 20 hours must be completed at SCC)

Requirement Met _____

GPA Requirement

(2.0 required for graduation)

Requirement Met _____

*Excess hours in these categories will be counted in category F (elective hours).

**History courses may count as either Social Science or Humanities credit.

Athletic Training Transfer Major (AS)

West Burlington Campus

Athletic Training Transfer Major

Sample curriculum - Associate of Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
ENG-105	Composition I	3	0	3
BIO-252	Biomolecular Processes	2	2	3
HIS-151	United States History to 1877	3	0	3
PEH-102	Health	3	0	3
DRA-110	Introduction to Film <i>or</i>	3	0	3
MUS-204	Introduction to Rock and Roll	3	0	3
		<u>14</u>	<u>2</u>	<u>15</u>
Spring Semester I				
ENG-106	Composition II	3	0	3
PET-105	Basic Athletic Training	3	0	3
MAT-127	College Algebra & Trigonometry	5	0	5
BIO-186	Microbiology	3	2	4
		<u>14</u>	<u>2</u>	<u>15</u>
Fall Semester II				
BIO-168	Anatomy & Physiology I	3	2	4
PET-230	Prevention & Care of Athletic Injuries	2	2	3
PHI-122	Philosophy of Contemporary Issues	3	0	3
SPC-112	Public Speaking	3	0	3
CHM-165	General Chemistry I	3	2	4
		<u>14</u>	<u>6</u>	<u>17</u>
Spring Semester II				
BIO-173	Anatomy & Physiology II	3	2	4
PEH-169	Principles of Weight Training	0	4	2
CHM-175	General Chemistry II	3	2	4
SOC-110	Introduction to Sociology <i>or</i>	3	0	3
SOC-115	Social Problems	3	0	3
PSY-111	Introduction to Psychology	3	0	3
		<u>12</u>	<u>8</u>	<u>16</u>

Program Total **63**

SCC has established 2+2 agreements with four-year institutions for this transfer major. Depending upon where you plan to transfer, your SCC coursework may differ from the example above. Contact your enrollment specialist to learn which courses you should take.

Program Contact:

Sheena K. Abbott, MS, ATC/L, CES
Great River Health Systems
skabbott@grhs.net

For current information, please visit our website at www.scciowa.edu.

Forensic Chemistry Transfer Major (AS)

Program Contact:

Amber Ruskell-Lamer

Associate Professor - Biology

Email: aruskell-lamer@sccciowa.edu

(319) 208-5000 x1957

Email: krosenberg@sccciowa.edu

BS, Western Washington University

MS, Western Illinois University

For current information, please visit our website at www.sccciowa.edu.

West Burlington and Keokuk Campuses

Forensic Chemistry Transfer Major

Sample curriculum - Associate of Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
ENG-105	Composition I	3	0	3
MAT-210	Calculus I	4	0	4
CHM-165	General Chemistry I	3	2	4
PHI-105	Introduction to Ethics	3	0	3
SPC-112	Public Speaking	3	0	3
		<u>16</u>	<u>2</u>	<u>17</u>
Spring Semester I				
GEO-121	World Regional Geography	3	0	3
CHM-175	General Chemistry II	3	2	4
MAT-216	Calculus II	4	0	4
ENG-106	Composition II	3	0	3
BIO-112	General Biology I	3	2	4
		<u>16</u>	<u>4</u>	<u>18</u>
Fall Semester II				
HIS-151	United States History to 1877 <i>or</i>	3	0	3
HIS-152	United States History since 1877 <i>or</i>	3	0	3
HIS-211	Modern Asian History	3	0	3
BIO-113	General Biology II	3	2	4
PSY-111	Introduction to Psychology	3	0	3
ART-101	Art Appreciation	3	0	3
PHY-212	Classical Physics I	4	2	5
		<u>16</u>	<u>4</u>	<u>18</u>
Spring Semester II				
BIO-186	Microbiology*	3	2	4
PHY-222	Classical Physics II	4	2	5
SOC-110	Introduction to Sociology <i>or</i>	3	0	3
PSY-241	Abnormal Psychology	3	0	3
MAT-156	Statistics	3	0	3
		<u>13</u>	<u>4</u>	<u>15</u>

Program Total 68

* *BIO-252 is not required as a prerequisite to BIO-186 if CHM-165 and CHM-175 are taken prior to this course.*

This transfer major has 2+2 agreements established with four-year colleges and universities. Depending upon where you plan to transfer, your SCC coursework may differ from the example above. Contact your enrollment specialist to learn which courses you should take.

Biology Transfer Major (AS)

West Burlington and Keokuk Campuses

Biology Transfer Major

Sample curriculum - Associate of Science Degree Requirements

		Lec.	Lab.	Credit
Fall Semester I				
ENG-105	Composition I	3	0	3
CHM-165	General Chemistry I	3	2	4
PHI-105	Introduction to Ethics	3	0	3
SPC-112	Public Speaking	3	0	3
PSY-111	Introduction to Psychology	3	0	3
		<u>15</u>	<u>2</u>	<u>16</u>
Spring Semester I				
CHM-175	General Chemistry II	3	2	4
ENG-106	Composition II	3	0	3
BIO-112	General Biology I	3	2	4
ART-101	Art Appreciation	3	0	3
SOC-110	Introduction to Sociology <i>or</i>	3	0	3
PSY-241	Abnormal Psychology	3	0	3
		<u>15</u>	<u>4</u>	<u>17</u>
Fall Semester II				
HIS-151	United States History to 1877 <i>or</i>	3	0	3
HIS-152	United States History since 1877 <i>or</i>	3	0	3
HIS-211	Modern Asian History	3	0	3
PHY-160	General Physics I	4	2	5
BIO-113	General Biology II	3	2	4
MAT-128	Precalculus	4	0	4
		<u>14</u>	<u>4</u>	<u>16</u>
Spring Semester II				
BIO-186	Microbiology *	3	2	4
PHY-161	General Physics II	4	2	5
MAT-156	Statistics	3	0	3
GEO-121	World Regional Geography	3	0	3
		<u>13</u>	<u>4</u>	<u>15</u>

Program Total 64

* *BIO-252 is not required as a prerequisite to BIO-186 if CHM-165 and CHM-175 are taken prior to this course.*

SCC has established 2+2 agreements with four-year institutions for this transfer major. Depending upon where you plan to transfer, your SCC coursework may differ from the example above. Contact your enrollment specialist to learn which courses you should take.

Program Contact:

Amber Ruskell-Lamer
 Associate Professor - Biology
 Email: aruskell-lamer@scciowa.edu
 (319) 208-5000 x1957
 Email: krosenberg@scciowa.edu
 BS, Western Washington University
 MS, Western Illinois University

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For current information, please visit our website at www.scciowa.edu.

West Burlington Campus, Keokuk Campus and Online

Diploma and Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
ACC-131	Principles of Accounting I	4	0	4
ACC-161	Payroll Accounting	3	0	3
ACC-311	Computer Accounting	3	0	3
CSC-110	Introduction to Computers	3	0	3
Elective	Program Electives	3	0	3
		<u>16</u>	<u>0</u>	<u>16</u>

Accounting Certificate awarded

Spring Semester I		Lec.	Lab.	Credit
ACC-132	Principles of Accounting II	4	0	4
ACC-261	Income Tax Accounting	3	0	3
BCA-157	Intermediate Spreadsheets	2	2	3
Elective	Communications Elective	3	0	3
Elective	Math <i>or</i> Social Science Elective	3	0	3
		<u>15</u>	<u>2</u>	<u>16</u>

Program Total 32

Accounting Assistant Diploma awarded

Fall Semester II		Lec.	Lab.	Credit
ACC-231	Intermediate Accounting I (WB, Online)	3	2	4
ACC-332	Computer Accounting - <i>Quickbooks</i>	2	0	2
BUS-185	Business Law I	3	0	3
MAT-156	Statistics	3	0	3
Elective	Social Science Elective	3	0	3
		<u>14</u>	<u>2</u>	<u>15</u>

Spring Semester II

ACC-221	Cost Accounting (WB, Online)	3	0	3
ACC-232	Intermediate Accounting II (WB, Online)	3	2	4
BUS-180	Business Ethics	3	0	3
BUS-936	Business Capstone (Online only)	1	0	1
Elective	Communications Elective	3	0	3
Elective	Program Elective	3	0	3
		<u>16</u>	<u>2</u>	<u>17</u>

Program Total 64

Program Electives:

Students must select at least 6 semester hours of approved Program Elective courses or may choose to substitute up to 6 semester hours of additional Communications, Math or Social Science Electives for the Program Elective courses. Approved Program Elective courses include:

ACC-932 Accounting Internship
 ADM-117 Keyboarding and Document Production
 ADM-133 Business Math/Calculators
 BUS-102 Introduction to Business
 BUS-121 Business Communication
 BUS-186 Business Law II
 FIN-130 Principles of Finance
 HUM-287 Leadership Development Studies
 MGT-101 Principles of Management
 MGT-170 Human Resources Management
 MKT-110 Principles of Marketing

Communications Electives:

Students must select at least 6 semester hours of approved Communications Elective courses. Approved Communications Elective courses include:

SPC-101 Fundamentals of Oral Communication *or*
 SPC-112 Public Speaking
and
 ENG-105 Composition I *or*
 ENG-106 Composition II *or*
 ENG-131 Business English

This program is designed to provide students with the necessary knowledge and skills for entry-level accounting positions. The program will also take the student through balance sheets, financial statements, income tax analysis and cost accounting.

This Associate of Applied Science Degree Program is four semesters in length. The second year is comprised of advanced level courses to increase the skill level of the student and thus contribute to potentially more rapid advancement upon employment.

Where will this take me?

Accounting Clerk
 Accounts Payable Clerk
 Bookkeeper
 Inventory Clerk
 Payroll Clerk
 Tax Accountant Clerk

Instructor and Staff

Kevin Rosenberg
 Professor - Accounting/Business
 (319) 208-5000 x5199
 Email: krosenberg@scciova.edu
 BBA, University of Iowa
 MA, University of Iowa

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciova.emsicareercoach.com>

Math Electives:

In addition to Statistics, students may choose to take 3 additional semester hours of approved Math Elective courses. Approved Math Elective courses include:

MAT-140 Finite Math
 MAT-165 Business Calculus

Social Science Electives:

Students must select at least 3 semester hours, and may choose to take 3 additional semester hours of approved Social Science Elective courses. Approved Social Science Elective courses include:

ECN-120 Principles of Macro-Economics
 ECN-130 Principles of Micro-Economics
 PSY-111 Introduction of Psychology
 SOC-110 Introduction to Sociology

Administrative Assistant – 80014

SCC's Administrative Assistant program prepares students to provide high-level administrative support by conducting research, preparing statistical reports, handling information requests, and performing clerical functions such as preparing correspondence, receiving visitors, arranging conference calls, and scheduling meetings.

An extra-curricular activity for students in Administrative Assistant programs is the Business Professionals of America. This organization provides students with leadership training, field trips, and competitive opportunities with other clubs throughout the state and nation.

SCC offers three different degrees.

- Administrative Assistant
- Administrative Assistant Legal
- Administrative Assistant Medical

Where will this take me?

- Administrative Assistant
- Executive Assistant
- School Secretary
- Real Estate Secretary
- Office Manager
- Records Manager

Instructor and Staff

Trisha Hopper

- Assistant Professor - Administrative Assistant
- (319) 208-5000 x5212
- Email: thopper@scciowa.edu
- AA, Carl Sandburg College
- BA, Western Illinois University
- Additional study: Western Illinois University

Carla Pilkington

- Assistant Professor - Administrative Assistant Medical Coding & Billing
- (319) 208-5000 x1986
- Email: cpilkington@scciowa.edu
- Diploma & AA, Southeastern Community College
- BA, Buena Vista University, Storm Lake, IA
- Additional study: UNI, Cedar Falls, IA

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus *(Keokuk campus offers selected courses)*

Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
ACC-131	Principles of Accounting I	4	0	4
ADM-117	Keyboarding and Document Production	2	2	3
ADM-162	Office Procedures	3	0	3
CSC-110	Intro to Computers	3	0	3
ENG-131	Business English	3	0	3
		15	2	16

Spring Semester I

ADM-120	Advanced Document Production	1	4	3
ADM-171	Records Management	1	2	2
BUS-121	Business Communications	3	0	3
MAT-110	Math for Liberal Arts <i>or</i>	3	0	3
MAT-702	Introduction to Math Applications <i>or</i>	2	2	3
MAT-772	Applied Math <i>(Online only) or</i>	3	0	3
BIO-105	Introductory Biology <i>or</i>	3	2	4
PHS-151	Introduction to Astronomy <i>or</i>	2	2	3
PHS-165	Introduction to Meteorology <i>or</i>	3	0	3
PHS-185	Introduction to Earth Science	3	0	3
SPC-101	Fundamentals of Oral Communication <i>or</i>	3	0	3
SPC-112	Public Speaking	3	0	3
*Elective	Business Elective	3	0	3
		13-14	6-8	17-18

Fall Semester II

ACC-332	Computer Accounting Quickbooks	2	0	2
ADM-230	Integrated Office Projects	1	4	3
ADM-133	Business Math/Calculators	3	0	3
ADM-149	Transcription	2	2	3
BUS-180	Business Ethics	3	0	3
MGT-101	Principles of Management	3	0	3
		14	6	17

Spring Semester II

ADM-235	Advanced Integrated Office Projects	1	4	3
BUS-290	Employment Search & Workplace Success	1	0	1
BUS-932	Business Internship	0	14	4
*Elective	Business Elective	3	0	3
PSY-102	Human and Work Relations <i>or</i>	3	0	3
PSY-111	Introduction to Psychology <i>or</i>	3	0	3
SOC-110	Introduction to Sociology <i>or</i>	3	0	3
SOC-114	Conflict Resolution in the Workplace	3	0	3
		8	18	14

Program Total 64-65

*Select from:

- | | |
|------------------------------------|-----------------------------------|
| BUS-102 Introduction to Business | BUS-185 Business Law I |
| FIN-121 Personal Finance | MGT-130 Principles of Supervision |
| MGT-170 Human Resources Management | MKT-160 Principles of Retailing |
| MKT-110 Principles of Marketing | SMM-108 Social Media Engagement |

Administrative Assistant – Legal – 80012

West Burlington Campus (*Keokuk campus offers selected courses*)

Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
ACC-131	Principles of Accounting I	4	0	4
ADM-117	Keyboarding and Document Production	2	2	3
ADM-162	Office Procedures	3	0	3
CRJ-100	Introduction to Criminal Justice	3	0	3
CSC-110	Introduction to Computers	3	0	3
ENG-131	Business English	3	0	3
		18	2	19

Spring Semester I		Lec.	Lab.	Credit
ADM-120	Advanced Document Production	1	4	3
ADM-171	Records Management	1	2	2
BUS-121	Business Communications	3	0	3
MAT-110	Math for Liberal Arts <i>or</i>	3	0	3
MAT-702	Introduction to Math Applications <i>or</i>	2	2	3
MAT-772	Applied Math (<i>Online only</i>) <i>or</i>	3	0	3
BIO-105	Introductory Biology <i>or</i>	3	2	4
PHS-151	Introduction to Astronomy <i>or</i>	2	2	3
PHS-165	Introduction to Meteorology <i>or</i>	3	0	3
PHS-185	Introduction to Earth Science	3	0	3
PSY-102	Human and Work Relations <i>or</i>	3	0	3
PSY-111	Introduction to Psychology <i>or</i>	3	0	3
SOC-110	Introduction to Sociology <i>or</i>	3	0	3
SOC-114	Conflict Resolution in the Workplace	3	0	3
		10-11	8	14-15

Fall Semester II		Lec.	Lab.	Credit
ADM-133	Business Math/Calculators	3	0	3
ADM-230	Integrated Office Projects	1	4	3
ADM-149	Transcription	2	2	3
BUS-180	Business Ethics	3	0	3
BUS-185	Business Law I	3	0	3
CRJ-101	Ethics in Criminal Justice	3	0	3
SPC-101	Fundamentals of Oral Communication <i>or</i>	3	0	3
SPC-112	Public Speaking	3	0	3
		14	6	15

Spring Semester II		Lec.	Lab.	Credit
ADM-235	Advanced Integrated Office Projects	1	4	3
ADM-186	Legal Documents	1	2	2
BUS-186	Business Law II	3	0	3
BUS-290	Employment Search & Workplace Success	1	0	1
BUS-932	Business Internship	0	14	4
		6	20	13

Program Total **64-65**

Recommended Additional Course Work

SMM-108	Social Media Engagement	2	2	3
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The Legal Administrative Assistant degree is designed to prepare students for employment in various legal office positions.

An extra-curricular activity for students in the Administrative Assistant program is the Business Professionals of America. This organization provides students with leadership training, field trips, and competitive opportunities with other clubs throughout the state and nation.

Where will this take me?

Legal Secretary
Legal Transcriptionist

Instructor and Staff

Trisha Hopper
Assistant Professor - Administrative Assistant
(319) 208-5000 x5212
Email: thopper@scciowa.edu
AA, Carl Sandburg College
BA, Western Illinois University
Additional study: Western Illinois University

Carla Pilkington
Assistant Professor - Administrative Assistant Medical Coding & Billing
(319) 208-5000 x1986
Email: cpilkington@scciowa.edu
Diploma & AA, Southeastern Community College
BA, Buena Vista University, Storm Lake, IA
Additional study: UNI, Cedar Falls, IA

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaid/finaid/gainemp.aspx>

Administrative Assistant – Medical – 80013

The Medical Administrative Assistant degree is designed to prepare students for employment in various medical office positions.

An extra-curricular activity for students in the Administrative Assistant program is the Business Professionals of America. This organization provides students with leadership training, field trips, and competitive opportunities with other clubs throughout the state and nation.

Where will this take me?

Medical Secretary
 Medical Records Manager
 Medical Claims Clerk
 Medical Administrative Assistant
 Medical Transcriptionist

Instructor and Staff

Trisha Hopper
 Assistant Professor - Administrative Assistant
 (319) 208-5000 x5212
 Email: thopper@scciowa.edu
 AA, Carl Sandburg College
 BA, Western Illinois University
 Additional study: Western Illinois University

Carla Pilkington
 Assistant Professor - Administrative Assistant Medical Coding & Billing
 (319) 208-5000 x1986
 Email: cpilkington@scciowa.edu
 Diploma & AA, Southeastern Community College
 BA, Buena Vista University, Storm Lake, IA
 Additional study: UNI, Cedar Falls, IA

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus *(Keokuk campus offers selected courses)*

Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
ACC-131	Principles of Accounting I	4	0	4
ADM-117	Keyboarding and Document Production	2	2	3
ADM-162	Office Procedures	3	0	3
CSC-110	Intro to Computers	3	0	3
ENG-131	Business English	3	0	3
		<u>15</u>	<u>2</u>	<u>16</u>

Spring Semester I

ADM-120	Advanced Document Production	1	4	3
ADM-171	Records Management	1	2	2
BUS-121	Business Communication	3	0	3
SPC-101	Fundamentals of Oral Communication <i>or</i>	3	0	3
SPC-112	Public Speaking	3	0	3
PSY-102	Human and Work Relations <i>or</i>	3	0	3
PSY-111	Introduction to Psychology	3	0	3
SOC-110	Introduction to Sociology <i>or</i>	3	0	3
SOC-114	Conflict Resolution in the Workplace	3	0	3
		<u>14</u>	<u>6</u>	<u>17</u>

Fall Semester II

ADM-230	Integrated Office Projects	1	4	3
ADM-133	Business Math/Calculators	3	0	3
ADM-149	Transcription	2	2	3
BIO-163	Essentials of Anatomy and Physiology	3	2	4
MAP-401	Medical Law and Ethics	1	0	1
HSC-114	Medical Terminology	2	2	3
		<u>12</u>	<u>10</u>	<u>17</u>

Spring Semester II

ADM-235	Advanced Integrated Office Projects	1	4	3
ADM-212	Medical Documents	1	2	2
BUS-290	Employment Search & Workplace Success	1	0	1
BUS-932	Business Internship	0	14	4
HIT-211	Basic Medical Insurance & Coding	2	2	3
		<u>5</u>	<u>22</u>	<u>13</u>

Program Total 63

Recommended Additional Course Work

SMM-108	Social Media Engagement	2	2	3
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Advanced Manufacturing Technology – 80043

West Burlington Campus

Associate of Applied Science Degree Requirements

	Lec.	Lab.	Credit
Fall Semester I			
CAD-101 Introduction to CAD	1	4	3
DRF-113 Fundamentals of Technical Drafting	1	4	3
ENG-105 Composition I	3	0	3
IND-163 OSHA & Plant Safety	2	0	2
MAT-702 Intro to Math Applications	2	2	3
MFG-237 Intro to Machine Trades	1	4	3
	10	14	17
Spring Semester I			
CAD-277 3-D Dimensional (3-D) Modeling	1	4	3
EGT-116 Continuous Quality Management	3	0	3
MFG-212 Basic Machine Theory	1	4	3
SOC-114 Conflict Resolution in the Workplace	3	0	3
SPC-112 Public Speaking	3	0	3
	11	8	15
Fall Semester II			
CAD-140 Parametric Solid Modeling	1	4	3
MFG-156 Introduction to CNC Machining	1	4	3
MFG-206 Manufacturing Processes I	1	4	3
MFG-228 Machine Operations II	2	4	4
PHY-160 General Physics I	4	2	5
	9	18	18
Spring Semester II			
CAD-230 Geometric Dimensioning & Tolerancing	1	2	2
ELE-127 Troubleshooting	0.5	1	1
MFG-165 Engineering Materials	3	0	3
MFG-303 Advanced CNC Programing	3	6	6
MFG-323 MasterCAM Design	1	2	2
MFG-511 Lean Quality Management	3	2	4
	11.5	13	18
Program Total			68

SCC's Advanced Manufacturing Technology Program is designed to provide students with the skills necessary to enter the production environment as entry level Computer Numeric Controls Programmers or Production Technicians.

The program provides broad theoretical and hands-on education for those seeking careers in the production field. This program emphasizes various levels of the production process.

Each level builds upon the previous section, continuing the students' education and knowledge base of the production process. Students will learn skills in safety, 2D and 3D production design, machining, and quality control with an emphasis placed on emerging trends including 5-axis design and machining principles. An OSHA 10 General Industry card will be awarded upon the successful completion of the IND-163 course.

Where will this take me?

- Computer Numerical Controls Machine Programmer (CNC)
- Production Maintenance Technician
- Tool and Die Maker
- Manufacturing Production Technician
- Manufacturing Engineering Technologist

Instructor and Staff

Susan Dunek
 Interim Dean for Career and Technical Education
 (319) 208-5000 x5193
 Email: sdunek@scciowa.edu

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaid/finaid/gainemp.aspx>

Animation for Television, Film, and New Media – 80042

SCC's new Animation for Television, Film and New Media program will prepare students to enter into a wide variety of careers in computer generated and stop motion animation for Information, Entertainment, Gaming and New Media industries.

Students will use state-of-the-art technology in SCC's all-new Animation Computer Lab and Stop Motion Lab located on the West Burlington campus.

Course competencies will include understanding the fundamentals of film, art, computers and new media communications. Skills in storytelling, concept design, modeling, rigging, texturing, animation, rendering, lighting and motion graphics will be emphasized. This broad-based instructional program will also feature training in a number of industry-specific software applications.

Where will this take me?

- 3-D Modeler
- Character Animator
- Effects Animator
- Filmmaker
- Lighting & Rendering Artist
- Stop-Motion Animator
- Storyboard & Concept Artist
- Technical Artist-Rigging
- Video Game Designer

Instructor and Staff

Tyler Horn
 Instructor - Animation for Television, Film and New Media
 (319) 208-5000 x5256
 Email: thorn@scciowa.edu
 BFA, The Illinois Institute of Art at Schaumburg

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus

Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
ANI-101	Animation Software I	2	2	3
ANI-116	Exploring Human Movement	2	2	3
ANI-136	Stop Motion/Video Production	2	2	3
ART-133	Drawing	2	2	3
DRA-110	Introduction to Film	3	0	3
ENG-105	English Composition I	3	0	3
		<u>14</u>	<u>8</u>	<u>18</u>

Spring Semester I

ANI-102	Animation Software II	2	2	3
ANI-109	Animation Principles & Techniques	2	6	5
ANI-100	Story Development for Animation	2	2	3
ENG-221	Creative Writing <i>or</i>	3	0	3
LIT-209	Forms of Literature: Film Adaptation	3	0	3
*Elective	Specialty Topics	0-3	1-2	1-4
		<u>9-12</u>	<u>11-12</u>	<u>15-18</u>

Fall Semester II

ANI-103	Animation Software III	2	2	3
ANI-210	Intermediate Animation	2	6	5
ANI-952	Topics	1	2	2
*Elective	Specialty Topics	0-3	1-2	1-4
MAT-110	Math for Liberal Arts	3	0	3
		<u>8-11</u>	<u>11-12</u>	<u>14-17</u>

Spring Semester II

ANI-104	Animation Software IV	2	2	3
ANI-211	Advanced Animation	2	6	5
ANI-932	Animation Internship <i>or</i>	0	15	3.7
ANI-941	Animation Studio Practicum	2	2	3
ANI-166	Capstone and Demo Reel	2	2	3
*Elective	Specialty Topics	0-3	1-2	1-4
		<u>7-10</u>	<u>13-27</u>	<u>15-18.7</u>

Program Total 62-71.7

*Specialty Topics Electives

- ART-120 2-D Design (2-2-3)
- ART-123 3-D Design (2-2-3)
- ART-138 Figure Drawing (2-2-3)
- ART-143 Painting (2-2-3)
- ART-184 Photography (2-2-3)
- BIO-163 Essentials of Anatomy and Physiology (3-2-4)
- DRA-141 Theater & Speech Participation (0-2-1)

Auto Collision Repair – 25203

West Burlington Campus

Diploma and Associate of Applied Science Degree Requirements

Fall Semester I		Lec	Lab.	Credit
CRR-300	Preparation	1	2	2
CRR-340	Metal Straightening	1	4	3
CRR-400	Panel Replacement and Adjustment	2	3	3.5
CRR-500	Damage Analysis	1	2	2
CRR-800	Introduction to Automotive Refinishing	1	3	2.5
MAT-702	Introduction to Math Applications	2	2	3
SCI-115	Basic Electricity	1	2	2
		9	18	18

Spring Semester I		Lec	Lab.	Credit
ENG-111	Technical Writing	3	0	3
CRR-120	MIG (GMAW) Welding	1	4	3
CRR-454	Glass Replacement	1	2	2
CRR-525	Straightening Structural Parts	2	7	5.5
CRR-610	Steering and Suspension	1	1	1.5
CRR-812	Surface Preparation	2	6	5
		10	20	20

Total Hours 38

Auto Body Diploma Awarded

Summer Session

ART-133	Drawing	2	2	3
HIS-251	United States History 1945 to Present OR	3	0	3
PHI-105	Intro to Ethics	3	0	3
SOC-114	Conflict Resolution in the Workplace OR	3	0	3
SOC-115	Social Problems	3	0	3
		8	2	9

Fall Semester II

CRR-201	Plastic Repair	1	2	2
CRR-575	Advanced Structural Repair	2	8	6
CRR-580	Advanced Frame Straightening	2	8	6
CRR-765	Computer Diagnosis for Auto Collision	2	6	5
		7	24	19

Spring Semester II

CRR-410	Full or Partial Body Panel Replacement	1	5	3.5
CRR-818	Intro to Waterborne Finishes	1	2	2
CRR-845	Color Tinting and Matching	1	3	2.5
CRR-875	Advanced Refinishing Methods	2	8	6
CRR-932	Internship	0	16	4
		5	34	18

Total Hours 84

AAS in Auto Collision Repair Awarded

The Auto Collision Repair Program provides training in shop processes used to restore damaged vehicles to the original condition. This program is designed to use the latest techniques in the field of Auto Collision Repair.

SCC's Auto Collision Repair program combines state-of-the-art equipment with an I-CAR curriculum, giving students the advanced knowledge required to keep up with the ever-changing automobile industry. I-CAR techniques and procedures are the industry standard for Auto Collision Professionals.

In addition to the auto industry, another growing industry that recruits automotive collision students, is the renewable energy industry. Many of the same concepts and skills involved in auto collision repair are also involved in the assembly and maintenance of wind energy components, including windmill blades and towers. While SCC offers no specific class dedicated to such specific technology, the concepts match closely.

Where will this take me?

- Auto Collision Estimator
- Auto Collision Equipment Sales
- Auto Collision Repair Technician
- Auto Glass Installation Expert
- Auto Wheel Alignment Technician
- Frame Repair Specialist
- Insurance Adjuster
- Paint Product Rep/Sales
- Paint Retailer
- Windmill Blade Repair Technician

Instructor and Staff

Randy Wachter
Assistant Professor - Auto Collision Repair
(319) 208-5000 x5110
Email: rwachter@scciowa.edu
AAS, Southeastern Community College

Tim Weaver
Assistant Professor - Auto Collision Repair
(319) 208-5000 x5111
Email: tweaver@scciowa.edu
ASE Master Collision Repair

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaid/finaid/gainemp.aspx>

Automotive Technology – 26361

The SCC Automotive Technology program is an ASE (Automotive Service Excellence) Certified program. This certification assures the student that the program meets the standards set by NATEF (National Automotive Technicians Education Foundation) regarding equipment, tools, scheduling, instructors and curriculum. In order for a technician to become ASE certified, he/she must have two years experience in addition to passing tests in the various areas of automotive repair. However, by attending the SCC Automotive Technology program, students may take these tests at any time during their education. If they pass these tests, they will become ASE Certified pro-tem upon graduation. After just one year of experience in the field, they become officially ASE Certified. One benefit of this program is the on-the-job training (OJT) it provides. OJT gives the students hands-on experience in an actual work environment. In this two year program, students will not only receive an education, but they will also receive hands-on experience while being paid.

The Automotive Technology Program - Management Option allows students to pursue a management track in their second year.

Where will this take me?

Automotive Diagnostic Expert,
Parts Sales, Repair Technician, or
Service Advisor
Insurance Adjuster
Transmission Specialist

Instructor and Staff

Wes Carpenter
Assistant Professor - Automotive
Technology
(319) 208-5000 x5109
Email: wcarpenter@scciowa.edu
AAS, Lincoln Technical Institute
BA, Western Illinois University
ASE Master Tech, ASE Advanced Engine
Performance GM and Ford Certified

Timothy Hunter
Instructor - Automotive Technology
(319) 208-5000 x5108
Email: tahunter@scciowa.edu
AAS, Indian Hills Community College

Kelly Kroll - Administrative Assistant
(319) 208-5000 x5107
Email: kkroll@scciowa.edu

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus

Diploma and Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
AUT-106	Intro to Automotive Technology	1	2	2
AUT-126	Fund. of Automotive Servicing	1	2	2
AUT-405	Automotive Suspension & Steering	2	6	5
AUT-505	Automotive Brake Systems	2	6	5
HSC-181	First Aid/CPR for Non-Health Care Workers	1	1	1.5
MAT-702	Introduction to Math Applications	2	2	3
		9	19	18.5

Spring Semester I

AUT-166	Automotive Engine Repair	3	6	6
AUT-244	Manual Drivetrains I	1	4	3
AUT-610	Automotive Electrical I	2	4	4
COM-102	Communication Skills	3	0	3
SCI-115	Basic Electricity	1	2	2
SDV-125	Workplace Readiness	1	0	1
		11	16	19

Program Total 37.5

Auto Mechanics Diploma awarded

Summer Session

SOC-114	Conflict Resolution in the Workplace <i>or</i>	3	0	3
SOC-115	Social Problems	3	0	3
HUM-287	Leadership Development Studies <i>or</i>	3	0	3
HIS-251	US History 1945 to Present <i>or</i>	3	0	3
PHI-105	Introduction to Ethics	3	0	3
		6	0	6

Fall Semester II

AUT-625	Automotive Electrical II	4	8	8
AUT-800	Engine Performance	4	8	8
PSY-111	Introduction Psychology <i>or</i>	3	0	3
SOC-110	Introduction Sociology	3	0	3
		11	16	19

Spring Semester II

AUT-190	Hybrid Fundamentals	1	2	2
AUT-207	Auto Transmissions & Transaxles	2	8	6
AUT-246	Manual Drivetrains II	1	4	3
AUT-700	Auto Heating & Air Conditioning	1	3	2.5
AUT-911	Cooperative/Internship	0	16	4
		5	33	17.5

Total Hours 80

AAS in Automotive Technology Awarded

Automotive Technology – Management Option – 80036

West Burlington Campus

Diploma and Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
AUT-106	Intro to Automotive Technology	1	2	2
AUT-126	Fund. of Automotive Servicing	1	2	2
AUT-405	Automotive Suspension & Steering	2	6	5
AUT-505	Automotive Brake Systems	2	6	5
HSC-181	First Aid/CPR for Non-Health Care Workers	1	1	1.5
MAT-702	Introduction to Math Applications	2	2	3
		<u>9</u>	<u>19</u>	<u>18.5</u>

Spring Semester I		Lec.	Lab.	Credit
AUT-166	Automotive Engine Repair	3	6	6
AUT-244	Manual Drivetrains I	1	4	3
AUT-610	Automotive Electrical I	2	4	4
COM-102	Communication Skills	3	0	3
SCI-115	Basic Electricity	1	2	2
SDV-125	Workplace Readiness	1	0	1
		<u>11</u>	<u>16</u>	<u>19</u>

Total Hours 37.5

Auto Mechanics Diploma awarded

Summer Session

SOC-114	Conflict Resolution in the Workplace <i>or</i>	3	0	3
SOC-115	Social Problems	3	0	3
HUM-287	Leadership Development Studies <i>or</i>	3	0	3
HIS-251	US History 1945 to Present <i>or</i>	3	0	3
PHI-105	Introduction to Ethics	3	0	3
		<u>6</u>	<u>0</u>	<u>6</u>

Fall Semester II

ACC-131	Principles of Accounting I	4	0	4
ADM-117	Keyboarding and Document Preparations	2	2	3
BUS-102	Introduction to Business	3	0	3
BUS-180	Business Ethics	3	0	3
MGT-101	Principles of Management	3	0	3
		<u>15</u>	<u>2</u>	<u>16</u>

Spring Semester II

BUS-121	Business Communication	3	0	3
HUM-287	Leadership Development Studies	3	0	3
MGT-130	Principles of Supervision <i>or</i>	3	0	3
MGT-170	Human Resources Management	3	0	3
MKT-110	Principles of Marketing	3	0	3
*Elective	Humanities	3	0	3
*Elective	Social Science	3	0	3
		<u>15</u>	<u>0</u>	<u>15</u>

Total Hours 77.5

*Choose one class from the group of available classes for this semester.

AAS in Auto Technology Management Awarded

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

The SCC Automotive Technology program is an ASE (Automotive Service Excellence) Certified program. This certification assures the student that the program meets the standards set by NATEF (National Automotive Technicians Education Foundation) regarding equipment, tools, scheduling, instructors and curriculum. In order for a technician to become ASE certified, he/she must have two years experience in addition to passing tests in the various areas of automotive repair. However, by attending the SCC Automotive Technology program, students may take these tests at any time during their education. If they pass these tests, they will become ASE Certified pro-tem upon graduation. After just one year of experience in the field, they become officially ASE Certified. One benefit of this program is the on the job training (OJT) it provides. OJT gives the students hands-on experience in an actual work environment. In this two year program, students will not only receive an education, but they will also receive hands-on experience while being paid. The Automotive Technology Program - Management Option allows students to pursue a management track in their second year.

Where will this take me?

Automotive Diagnostic Expert, Parts Sales, Repair Technician, or Service Advisor
Insurance Adjuster
Transmission Specialist

Instructor and Staff

Wes Carpenter
Assistant Professor - Automotive Technology
(319) 208-5000 x5109
Email: wcarpenter@scciowa.edu
AAS, Lincoln Technical Institute
BA, Western Illinois University
ASE Master Tech, ASE Advanced Engine Performance GM and Ford Certified

Timothy Hunter
Instructor - Automotive Technology
(319) 208-5000 x5108
Email: tahunter@scciowa.edu
AAS, Indian Hills Community College

Kelly Kroll - Administrative Assistant
(319) 208-5000 x5107
Email: kkroll@scciowa.edu

Biomedical Electronics Technician – 80021

Electronics in the medical and health field is an important and growing part of patient care. From the ambulance to the operating room to your physician's office, electronic biomedical equipment supports health care. The Biomedical Technology program combines electronics technology with health sciences courses. And, with its internship in the last semester, students will complete a 16 hour per week clinical. The internship brings together electronics and health courses, further preparing students for entry into the field. Admissions standards apply to this program. Please contact the Admissions office for details.

Where will this take me?

- Biomedical Electronic Technician
- Medical Equipment Service Technician
- Medical Equipment Sales Representative
- Instrumentation Technician

Instructor and Staff

Derek Schreiner
 Associate Professor - Electronics Technology
 (319) 208-5000 x5211
 Email: dschreiner@scciowa.edu
 AS & AA, Southeastern Community College
 BA, Iowa Wesleyan College
 Additional study: St. Ambrose University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus

Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
CAD-101	Introduction to CAD	1	4	3
CSC-140	Computer Fundamentals	3	2	4
ELT-116	Principles of Electronics	3	4	5
MAT-127	College Algebra & Trigonometry or	5	0	5
MAT-704	Math Applications	5	0	5
		12	10	17
Spring Semester I				
BIO-163	Essentials of Anatomy and Physiology	3	2	4
ELT-119	Applied Human Biology/Biomedical Tech	3	0	3
ELT-329	Digital Electronics for ET or	3	2	4
EGT-420	Digital Electronics	2	2	3
ELT-355	Electronic Circuits I	3	4	5
ENG-111	Technical Writing	3	0	3
		13-14	8	18-19
Fall Semester II				
ELT-357	Electronic Circuits II	3	4	5
ELT-630	Microprocessor/Interfacing	3	4	5
ELT-800	Biomedical Electronics Systems	3	2	4
NET-142	Network Essentials	3	0	3
		12	10	17
Spring Semester II				
ELT-435	Telecommunications	4	2	5
ELT-801	Medical Documentation & Compliance	3	0	3
ELT-932	Internship	0	16	4
SOC-110	Introduction to Sociology or	3	0	3
SOC-114	Conflict Resolution in the Workplace or	3	0	3
PSY-111	Introduction to Psychology	3	0	3
		10	18	15

Program Total 66-67

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaidd/finaid/gainemp.aspx>

West Burlington Campus and Online *(Keokuk offers selected courses)*

It is strongly recommended that students enrolled in any of the business curricula have attained a keyboarding competency rate of 30 wpm.

Associate of Applied Science Degree

	Lec.	Lab.	Credit
Fall Semester I			
BUS-102 Introduction to Business	3	0	3
CSC-110 Introduction to Computers	3	0	3
ENG-105 Composition I	3	0	3
ENG-131 Business English	3	0	3
PSY-111 Introduction to Psychology <i>or</i>	3	0	3
SOC-110 Introduction to Sociology	3	0	3
	15	0	15
Spring Semester I			
ACC-142 Financial Accounting	3	0	3
BUS-121 Business Communications	3	0	3
BUS-180 Business Ethics	3	0	3
MGT-130 Principles of Supervision	3	0	3
MKT-110 Principles of Marketing	3	0	3
	15	0	15
Fall Semester II			
BUS-185 Business Law I	3	0	3
ECN-130 Principles of Micro-Economics	3	0	3
MAT-156 Statistics	3	0	3
MGT-101 Principles of Management	3	0	3
MKT-140 Principles of Selling <i>or</i>	3	0	3
MKT-150 Principles of Advertising	3	0	3
SPC-112 Public Speaking	3	0	3
	18	0	18
Spring Semester II			
ACC-146 Managerial Accounting	3	0	3
BUS-936 Business Capstone	1	0	1
ECN-120 Principles of Macro-Economics	3	0	3
FIN-130 Principles of Finance	3	0	3
HUM-287 Leadership Development Studies	3	0	3
MGT-170 Human Resource Management	3	0	3
	16	0	16
Program Total			64

The associate of applied science degree is intended for those students who wish to specialize in business.

The Business Professionals of America is an activity for students in the Business Program. This organization provides students with leadership training, field trips and competitive opportunities with other clubs throughout Iowa and the United States.

Where will this take me?

- Administrative Assistant
- Business Manager
- Human Resources Manager
- Marketing, Advertising and Public Relations Manager
- Merchandise Manager
- Office Manager
- Supervisor

Instructor and Staff

- Myra Bruegger
 Professor - Accounting/Business
 (319) 208-5000 x5198
 Email: mbruegger@scciowa.edu
 BS, Western Illinois University
 MBA, Western Illinois University, CPA
- Deborah Hedger
 Professor - Economics/Business
 (319) 208-5000 x5226
 Email: dhedger@scciowa.edu
 AA, Southeastern Community College
 BBA, Western Illinois University
 MA, Western Illinois University
 PhD, Northern Illinois University
- Kevin Rosenberg
 Professor - Accounting/Business
 (319) 208-5000 x5199
 Email: krosenberg@scciowa.edu
 BBA, University of Iowa
 MA, University of Iowa
- Renee Smith
 Associate Professor - Computer Science
 (319) 208-5000 x5194
 Email: rsmith@scciowa.edu
 AA & AAS, Southeastern Community College
 BA, Buena Vista University
 MBA, Grand Canyon University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

Computer Aided Design Technology – 80019

SCC's Computer Aided Design Technology Program AAS Degree is designed to provide the student with skills necessary to enter the industrial environment as a drafter and/or design technician. The program provides broad theoretical and hands-on education for those seeking careers in the drafting and design or related fields.

Students also have the option of choosing related courses in the mechanical or construction areas. Engineering graphics and architectural construction & design are covered in the program with emphasis on the current trends, including computer aided drafting and design.

Where will this take me?

- Architectural Engineering Technician
- CAD Operator
- Drafter/Design Technician
- Mechanical Engineering Technician
- Project Manager

Instructor and Staff

Jonathan Gaddis
 Assistant Professor - Drafting
 (319) 208-5000 x5258
 Email: jgaddis@scciowa.edu
 AAS, Southeastern Community College
 BA, Iowa Wesleyan College
 MBA, St. Ambrose University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus

Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
CAD-101	Introduction to CAD	1	4	3
CSC-110	Introduction to Computers	3	0	3
DRF-113	Fundamentals of Technical Drafting	1	4	3
ENG-105	Composition I <i>or</i>	3	0	3
ENG-111	Technical Writing	3	0	3
MAT-127	College Algebra & Trigonometry <i>or</i>	5	0	5
MAT-704	Math Applications	5	0	5
		13	8	17
Spring Semester I				
CAD-277	3-D Modeling I	1	4	3
MFG-212	Basic Machine Theory	1	4	3
PHY-106	Survey of Physics <i>or</i>	3	2	4
PHY-160	General Physics I	4	2	5
SOC-114	Conflict Resolution in the Workplace	3	0	3
SPC-101	Fundamentals of Oral Communication <i>or</i>	3	0	3
SPC-112	Public Speaking	3	0	3
		11-12	10	16-17
Fall Semester II				
ARC-113	Architectural Drafting I	2	4	4
CAD-140	Parametric Solid Modeling <i>or</i>	1	4	3
EGT-400	Introduction to Engineering Design	1	4	3
DRF-121	Fundamentals of Technical Drafting II	1	4	3
SDV-153	Pre-Employment Strategies	2	0	2
ANI-101	Animation Software I <i>or</i>	2	2	3
CON-270	Mechanical Systems <i>or</i>	1	4	3
NET-122	Computer Hardware Basics	2	2	3
		7-8	14-16	15
Spring Semester II				
ARC-129	Residential/Light Commercial Drafting	2	4	4
CAD-230	Geometric Dimensioning and Tolerancing	1	2	2
CAD-248	Parametric CAD II	1	4	3
MFG-511	Lean Quality Manufacturing	3	2	4
		7	12	13

Program Total 61-62

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaid/finaid/gainemp.aspx>

Construction Technology – Carpentry Emphasis – 80006

West Burlington Campus

Diploma and Associate of Applied Science Degree Requirements

		Lec.	Lab.	Credit
Fall Semester I				
CON-108	Construction Safety	1	0	1
CON-147	Carpentry I	3	6	6
CON-332	Construction Materials & Resources	3	0	3
ENG-105	Composition I or	3	0	3
ENG-111	Technical Writing	3	0	3
		<u>10</u>	<u>6</u>	<u>13</u>
Spring Semester I				
CAD-101	Introduction to CAD	1	4	3
CON-113	Construction Printreading	1	2	2
CON-148	Carpentry II	3	6	6
CON-252	Construction Electricity	1	4	3
SOC-114	Conflict Resolution in the Workplace	3	0	3
		<u>9</u>	<u>16</u>	<u>17</u>
Summer Session				
CON-350	Construction Management Internship	0	20	5
<i>Program Total</i>				35

Building Construction Diploma awarded

		Lec.	Lab.	Credit
Fall Semester II				
CON-149	Carpentry III	3	6	6
CON-270	Mechanical Systems	1	4	3
CON-340	Construction Surveying <i>or</i>	2	2	3
HEQ-131	Safety & Intro to Heavy Equipment	2	2	3
MAT-702	Introduction to Math Applications	2	2	3
		<u>8</u>	<u>14</u>	<u>15</u>
Spring Semester II				
CON-128	Construction Management and Estimating	2	2	3
CON-262	Commercial Carpentry II	3	6	6
CON-345	Soils & Concrete	3	0	3
PSY-102	Human and Work Relations	3	0	3
ART-133	Drawing <i>or</i>	2	2	3
SPC-112	Public Speaking	3	0	3
		<u>16</u>	<u>10</u>	<u>21</u>
<i>Program Total</i>				71

The SCC Construction Technology Program combines the NCCER Curricula with the Associate of Applied Science Degree requirements. Students will receive an Associate of Applied Science Degree upon completion of this program. Program curriculum is based on NCCER Curricula & combines illustrated instructional material with structured classroom activities.

This program emphasizes four levels of carpentry. Each level builds on the previous level, continuing the students' education and knowledge of carpentry. Agreements exist with local high schools that will allow students to take up to level 2 of carpentry while still in high school.

During the summer term, between the students' first and second year, a paid internship is required. This paid internship enables the student to experience an actual work environment provided by a local construction company.

Upon graduation, the student will receive an Associate of Applied Science Degree.

Where will this take me?

- Carpenter
- Concrete Finisher
- Construction Materials Sales Representative
- Estimator
- Construction Materials Supplies Coordinator
- Finish Carpenter
- Framer
- Roofer

Instructor and Staff

Douglas Riley
 Assistant Professor - Construction Technology
 (319) 208-5000 x5184
 Email: driley@scciowa.edu
 AA, Southeastern Community College
 BA, Iowa Wesleyan College

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

Construction Technology – Management Option – 80029

The SCC Construction Technology Program combines the NCCER Curricula with the Associate of Applied Science Degree requirements. Students will receive an Associate of Applied Science Degree upon completion of this program. Program curriculum is based on NCCER Curricula & combines illustrated instructional material with structured classroom activities.

This program emphasizes four levels of carpentry. Each level builds on the previous level, continuing the students' education and knowledge of carpentry. Agreements exist with local high schools that will allow students to take up to level 2 of carpentry while still in high school.

During the summer term, between the students' first and second year, a paid internship is required. This paid internship enables the student to experience an actual work environment provided by a local construction company.

Upon graduation, the student will receive an Associate of Applied Science Degree.

Where will this take me?

- Job Site Superintendent
- Supervisory Managing Positions

Instructor and Staff

Douglas Riley
 Assistant Professor - Construction Technology
 (319) 208-5000 x5184
 Email: driley@scciowa.edu
 AA, Southeastern Community Colleg
 BA, Iowa Wesleyan College

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus

Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
CON-108	Construction Safety	1	0	1
CON-332	Construction Materials & Resources	3	0	3
DRF-113	Fundamentals of Technical Drafting	1	4	3
ECN-120	Principles of Macro-Economics	3	0	3
ENG-105	Composition I	3	0	3
MAT-127	College Algebra & Trigonometry	5	0	5
		16	4	18
Spring Semester I				
ACC-142	Financial Accounting	3	0	3
CAD-101	Introduction to CAD	1	4	3
CON-113	Construction Printreading	1	2	2
HIS-151	U.S. History to 1877 <i>or</i>	3	0	3
HIS-152	U.S. History since 1877	3	0	3
PSY-102	Human & Work Relations	3	0	3
		11	6	14
Summer Semester				
CON-350	Construction Management Internship	0	20	5
Fall Semester II				
ARC-113	Architectural Drafting I	2	4	4
CON-340	Construction Surveying <i>or</i>	2	2	3
HEQ-131	Safety & Intro to Heavy Equipment	2	2	3
MGT-101	Principles of Management	3	0	3
PHY-160	General Physics I	4	2	5
		11	8	15
Spring Semester II				
CON-128	Construction Management Estimating	2	2	3
CON-345	Soils & Concrete	3	0	3
PHY-161	General Physics II	4	2	5
SOC-114	Conflict Resolution in the Workplace	3	0	3
ART-133	Drawing <i>or</i>	2	2	3
SPC-112	Public Speaking	3	0	3
		14-15	4-6	14

Program Total 69

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaidd/finaid/gainemp.aspx>

The Criminal Justice Program is designed to prepare students for careers in several areas of the administration of justice. Program graduates find jobs with local police departments, sheriff's offices, the state highway patrol, federal/state narcotics agencies, correctional institutions and state and local probation and parole agencies. This program is also designed to allow graduates to transfer to four-year institutions to earn a Bachelor's degree. The Associate of Applied Science Degree is awarded upon successful completion of program requirements.

NOTE: Students who have a criminal background history may complete the program. However, these students will have serious difficulty obtaining an internship or employment.

Where will this take me?

- Baliff
- Corrections Officer
- Federal/State Law Enforcement Agent
- Police Officer
- Rehabilitation Counselor
- Sheriff's Deputy

Instructor and Staff

Cindy Shireman
 Professor - Criminal Justice
 (319) 208-5000 x5232 or x1998
 Email: cshireman@scciowa.edu
 BA, University of Iowa
 MA, University of Iowa
 MS, Kaplan University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus, Keokuk Campus and Online

Associate of Applied Science Degree Requirements

	Lec.	Lab	Credit
Fall Semester I			
CRJ-100 Introduction to Criminal Justice	3	0	3
CRJ-101 Ethics in Criminal Justice	3	0	3
CRJ-120 Introduction to Corrections	3	0	3
ENG-105 Composition I	3	0	3
MAT-110 Math for Liberal Arts	3	0	3
	15	0	15
Spring Semester I			
CRJ-111 Police and Society	3	0	3
CRJ-130 Criminal Law	3	0	3
ENG-106 Composition II	3	0	3
PSY-111 Introduction to Psychology	3	0	3
SOC-240 Criminology	3	0	3
	15	0	15
Fall Semester II			
*CRJ-109 Theories of Interviewing	3	0	3
CRJ-132 Constitutional Law	3	0	3
*CRJ-141 Criminal Investigation	3	0	3
HUM-114 Multicultural Perspectives	3	0	3
PSY-241 Abnormal Psychology	3	0	3
SOC-230 Juvenile Delinquency	3	0	3
	18	0	18
Spring Semester II			
CRJ-222 Correctional Treatment Methods <i>or</i>	3	0	3
CRJ-932 Internship	0	12	3
POL-111 American National Government <i>or</i>	3	0	3
POL-112 American State and Local Government	3	0	3
CRJ-301 Intro to Homeland Security	3	0	3
SPC-112 Public Speaking	3	0	3
BIO 105 Introductory Biology <i>or</i>	3	2	4
ENV-111 Environmental Science <i>or</i>	3	2	4
SCI-123 Forensic Science	3	2	4
	15	2	16
<i>Program Total</i>			64

**Classes to be taken during same semester.*

NOTE: Students who have a criminal background history may complete the program. However, these students will have serious difficulty obtaining an internship or employment.

Electronics Technology – 80031 or 25131

SCC's Electronics Technology programs are intended to provide a broad base of knowledge, through courses and laboratories. There are three programs to choose from: Electronics Technology Diploma, Electronics Technology AAS, Biomedical Technology AAS. The Electronics Technology program is designed so that the first two semesters include a selection of core courses that result in an Electronics Technology Diploma upon completion. Technical elective(s) in the third and fourth semesters allow students to select an area of specialization. Students learn the skills of an electronics technician and in addition, develop skills in mechanical design, construction, analysis and repair of various electronic circuits. The Electronics Technology Program is designed to provide students with the necessary skills and knowledge to begin working in industry at an entry-level position as an electronics technologist. Admissions standards apply to this program. Please contact the Admissions office for details.

Where will this take me?

- Applications Engineer
- Prototype Assembler
- Electrical Test Engineer
- Electronics Quality Control Technician
- Engineering Manager
- Field Service Technician

Instructor and Staff

Derek Schreiner
 Associate Professor - Electronics Technology
 (319) 208-5000 x5211
 Email: dschreiner@scciowa.edu
 AS & AA, Southeastern Community College
 BA, Iowa Wesleyan College
 Additional study: St. Ambrose University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus

Diploma and Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
CAD-101	Introduction to CAD	1	4	3
CSC-140	Computer Fundamentals	3	2	4
ELT-116	Principles of Electronics	3	4	5
MAT-127	College Algebra & Trigonometry <i>or</i>	5	0	5
MAT-704	Math Applications	5	0	5
		<u>12</u>	<u>10</u>	<u>17</u>

Spring Semester I

ELT-232	PLC Applications	2	4	4
ELT-329	Digital Electronics for ET <i>or</i>	3	2	4
EGT-420	Digital Electronics	2	2	3
ELT-355	Electronic Circuits I	3	4	5
ENG-111	Technical Writing	3	0	3
		<u>10-11</u>	<u>10</u>	<u>15-16</u>

Electronics Technology Diploma Awarded – 80031

Fall Semester II

ELT-357	Electronic Circuits II	3	4	5
ELT-486	Electromechanical Technology	2	2	3
ELT-630	Microprocessor/Interfacing	3	4	5
NET-142	Network Essentials	3	0	3
		<u>11</u>	<u>10</u>	<u>16</u>

Spring Semester II

ELT-435	Telecommunications	4	2	5
PHY-106	Survey of Physics	3	2	4
MFG-511	Lean Quality Manufacturing	3	2	4
SOC-110	Intro to Sociology or	3	0	3
SOC-114	Conflict Resolution in the Workplace or	3	0	3
PSY-111	Intro to Psychology	3	0	3
		<u>13</u>	<u>6</u>	<u>16</u>

Program Total 64-65

Associate of Applied Science Degree Awarded – 25131

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaid/finaid/gainemp.aspx>

Emergency Medical Services – 26471

West Burlington Campus

Admission standards apply to this program.

- A. ALEKS testing is required.
- B. Proof of high school graduation is required for admission to the Paramedic program.
- C. Students will be required to pass a mandatory background check and drug screening.

Please contact Enrollment Services for details.

All health career programs require students to earn a grade of “C” (2.0) or above in all coursework within the program. All other eligibility requirements must be met.

Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Clin.	OJT.	Credit
BIO-163	Essentials of Anatomy & Physiology	3	2			4
CSC-110	Introduction to Computers	3	0			3
HSC-114	Medical Terminology	2	2			3
MAT-702	Introduction to Math Applications	2	2			3
PSY-111	Introduction to Psychology	3	0			3
		<u>13</u>	<u>6</u>			<u>16</u>

Spring Semester I		Lec.	Lab.	Clin.	OJT.	Credit
*EMS-201	Emergency Medical Technician	5	2		4	7
ENG-105	Composition I	3	0			3
HUM-114	Multicultural Perspectives	3	0			3
PHI-105	Introduction to Ethics	3	0			3
		<u>14</u>	<u>2</u>		<u>4</u>	<u>16</u>

Fall Semester II		Lec.	Lab.	Clin.	OJT.	Credit
EMS-663	Paramedic I	12	8			16

Spring Semester II		Lec.	Lab.	Clin.	OJT.	Credit
EMS-664	Paramedic II	10	6	6	0	15

Summer Semester		Lec.	Lab.	Clin.	OJT.	Credit
EMS-665	Paramedic III	3	2		12	7

Program Total 70

Emergency Medical Technician Certificate awarded after completion of EMS-201.

Paramedic Certificate awarded after completion of EMS-665.

**Successful completion of EMT State Certification required prior to admission to the Paramedic Program.*

***Optional Courses may not be available every term.*

***EMS-114, Emergency Medical Responder (1-2-2)*

***EMS-239, Adv. Emergency Medical Technician (5-2-3-7)*

The Emergency Medical Technician (EMT) Paramedic curriculum is designed to prepare the student for the National Registry exam for certification as a Paramedic. Selected general education courses are related to the field of Emergency Medical Services and will provide the student with a broad base upon which to make reasoned decisions when giving emergency care.

The EMT classes are offered in both night and day part-time format and the Paramedic is offered as a full-time day format.

Students enrolling in the Paramedic program must have a high school diploma or high school equivalency diploma and current EMT certification.

The Southeastern Community College Emergency Medical Services Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Commission on Accreditation of Allied Health Education Programs 25400 US Highway 19 N., Suite 158 Clearwater, FL 33763 (727) 210-2350 www.caahep.org.

To contact CoAEMSP: 8301 Lakeview Parkway Suite 111-312 Rowlette, TX 75088 (214) 703-8445 FAX (214) 703-8992 www.coaemsp.org.

Where will this take me?

- Certified EMT/Paramedic working:
- Ambulance Service
- Fire Station
- Hospital
- Industry
- Air Medical Transport

Instructor and Staff

James Steffen

Instructor - Emergency Medical Services
(319) 208-5000 x5253

Email: jsteffen@scciova.edu

AAS, Southeastern Community College
BS, Bellevue University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciova.emsicareercoach.com>

Industrial Maintenance Technology – 80040

This program is developed to prepare individuals as plant maintenance technicians. Students will learn technical skills in maintaining and troubleshooting electrical and mechanical systems used in industry. Skills are developed in mechanical and electrical theory, troubleshooting and repair for today's industrial systems. The Electrical Maintenance Technician certificate is awarded after completion of the first semester.

The Mechanical Maintenance Technician certificate is awarded after completion of the second semester.

Instruction is delivered in a module format designed for flexibility and customization for each student. Module delivery allows students to take as many or as few training sessions as they want. Students interested in earning a one-year diploma or a two-year Associate of Applied Science degree can do so by attending full-time. Those interested in learning a select set of skills can also take advantage of the program by taking only those modules relevant to their needs.

Where will this take me?

- Industrial Engineering Technologist
- Industrial Engineering Technician
- Industrial Engineer
- Industrial Safety & Health

Instructor and Staff

Jeron Lindsay
 Instructor - Industrial Maintenance Technology
 (319) 208-5000 x1937
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 Electrical & Mechanical Maintenance Certificates, Southeastern Community College
 Welding & Industrial Maintenance Diploma, Southeastern Community College

Jason Radel
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 AAS, Southeastern Community College
 AAS, Northwest Iowa Community College

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

Keokuk Campus

Certificates, Diploma and Associate of Applied Science Degree Requirements

First Semester		Lec.	Lab.	Credit
BUS-121	Business Communications	3	0	3
ELE-195	Motor Controls	1	4	3
ELE-310	Industrial Electricity	1	2	2
ELT-250	Programmable Logic Controllers	1	4	3
ELT-295	AC/DC Fundamentals	1	2	2
IND-163	Plant Safety	2	0	2
MAT-702	Intro to Math Applications	2	2	3
		<u>11</u>	<u>14</u>	<u>18</u>

Electrical Maintenance Technology Certificate Awarded

Second Semester		Lec.	Lab.	Credit
EGT-142	Fluid Power 1 (Hydraulics)	1	2	2
EGT-143	Fluid Power 2 (Pneumatics)	1	2	2
ELE-116	Blueprint Reading	1	0	1
IND-104	Industrial Pumps	.5	1	1
IND-141	Power Transmission	1	2	2
MFG-209	Machine Shop Practices	1	4	3
MFG-520	Predictive Maintenance	1	2	2
PSY-102	Human and Work Relations <i>or</i>	3	0	3
PSY-111	Introduction to Psychology <i>or</i>	3	0	3
SOC-110	Introduction to Sociology	3	0	3
		<u>9.5</u>	<u>13</u>	<u>16</u>

Mechanical Maintenance Technology Certificate Awarded

Diploma Total **34**

Industrial Maintenance Technology Diploma Awarded

Third Semester		Lec.	Lab.	Credit
EGT-147	Hydraulic Power Systems & Troubleshooting	.5	1	1
ELT-132	Motor Drives	.5	1	1
ELT-262	Adv. PLC & System Integration (Mechatronics)	2	8	6
ENG-105	Composition I	3	0	3
IND-106	Machine Shop II	1	2	2
IND-107	Valves	1	0	1
		<u>8</u>	<u>12</u>	<u>14</u>

Fourth Semester

CAD-114	AutoCad I (1-2-2) [Online] <i>or</i>	1	2	2
CAD-101	Intro to CAD (WB Campus only)	1	4	3
ELE-127	Troubleshooting	.5	1	1
ELT-176	Instrumentation	1	4	3
IND-179	Boiler Operations and Control	1	2	2
IND-180	Industrial Heating and Cooling	1	2	2
HIS-151	US History to 1877 <i>or</i>	3	0	3
HIS-152	US History since 1877 <i>or</i>	3	0	3
PHI-101	Introduction to Philosophy <i>or</i>	3	0	3
PHI-105	Introduction to Ethics	3	0	3
BIO-105	Introductory to Biology <i>or</i>	3	2	4
ENV-111	Environmental Science <i>or</i>	3	2	4
PHS-151	Introduction to Astronomy	2	2	3
		<u>9.5-10.5</u>	<u>11-15</u>	<u>16-18</u>

Program Total **64-66**

Industrial Maintenance Technology Associate of Applied Science Degree Awarded

West Burlington Campus

Associate of Applied Science Degree Requirements

Fall Semester I	Lec.	Lab.	Credit
CIS-125 Intro to Prog. Logic w/Lang	2	2	3
CSC-110 Intro to Computers	3	0	3
NET-122 Comp. Hardware Basics	2	2	3
NET-142 Network Essentials	3	0	3
NET-442 Linux Operation System	2	2	3
MAT-702 Intro to Math Applications <i>or</i>	2	2	3
MAT-772 Applied Math	3	0	3
	14/15	6/8	18

Spring Semester I	Lec.	Lab.	Credit
NET-101 IT Fundamentals	1	0	1
CIS-504 Structural Systems Analysis	2	2	3
ENG-105 Composition I <i>or</i>	3	0	3
ENG-111 Technical Writing	3	0	3
PHI-142 Ethics in Business <i>or</i>	3	0	3
HUM-287 Leadership Development <i>or</i>	3	0	3
SOC-114 Conflict Resolution in the Workplace	3	0	3
NET-310 Virtual Machines	2	2	3
NET-314 Windows Server	2	4	4
	13	8	17

Diploma Total **35**

IT Technician Diploma Awarded

Fall Semester II	Lec.	Lab.	Credit
BUS-203 Professional Development	2	0	2
CFR-100 Intro to Comp. Forensics	2	2	3
NET-637 Network Intrusion Investigation	2	2	3
NET-716 Database Administration/Service Application	2	2	3
HUM-287 Leadership Development <i>or</i>	3	0	3
PSY-111 Intro to Psychology <i>or</i>	3	0	3
SOC-110 Intro to Sociology	3	0	3
	11	6	14

Spring Semester II	Lec.	Lab.	Credit
CIS-810 Emerging Technologies Seminar	1	0	1
NET-153 Adv. Networking	2	4	4
NET-717 Email Applications	2	2	3
NET-820 Network Specialist Internship	0	15	3.7
SPC-112 Public Speaking	3	0	3
	8	21	14.7

Program Total **63.7**

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaaid/finaid/gainemp.aspx>

SCC's Information Technology Programs use the latest equipment and software and offer students the opportunity to specialize in one of two options: Network Administration & Cyber Security or Web Design & Development. SCC's Network Administration & Cyber Security Programs provide experience with Microsoft and Linux operating systems. They place emphasis on hands-on installation, maintenance, and administration of PC networks and use the latest equipment and software. The Network program also includes security principles, along with router, switch and firewall configuration.

After completing the first two semesters, students will have an opportunity to receive an IT Technician Diploma. With the 34 credit hour diploma, students will be able to work as PC support technicians, technical retail associates, bench technicians or help-desk technicians.

Students who wish to continue their education and complete the second year of the program will receive an Associates of Applied Science Degree in Network Administration & Cyber Security. During the second year, students will take NET-153, Advanced Networking, which includes the CIW Network Technology Associates exam. Those who pass will receive the CIW NTA certificate.

Where will this take me?

- Network Administration & Cyber Security
- Network Administrator
- Network Installer
- Network Technician

Instructor and Staff

Brenda Wamsley
 Instructor - Information Technology
 (319) 208-5000 x5195
 Email: bwamsley@scciowa.edu
 Diploma, Southeastern Community College

Stewart Jack
 Instructor - Information Technology
 (319) 208-5000 x5196
 Email: sjack@scciowa.edu
 BS, Glasgow Caledonian University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

Information Technology – Web Design & Development – 80010

SCC's Information Technology Programs use the latest equipment and software and offer students the opportunity to specialize in one of two options: Network

Administration & Cyber Security or Web Design & Development.

The Web Design & Development Program is designed to offer a broad spectrum of PC skills needed in small to medium-sized organizations. Students receive instruction on networking, graphic and web design, and small business management.

Completion of the first year earns students a Web Design Diploma and is focused on content creation and design. Image editing, layout, animation, sound and video production go hand in hand with HTML scripting, responsive design techniques and electives such as photography or drawing to serve up a year bursting with creativity.

The second year challenges a student's technical ability with courses in online databases, web programming, interface design and building mobile apps. We top things off with the development of an electronic portfolio designed to present student accomplishments to prospective employers and an industry internship to develop real world work experience.

Where will this take me?

- Web Design & Development
- Web Developer
- Web Site Administrator
- Webmaster

Instructor and Staff

Brenda Wamsley

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Diploma, Southeastern Community College

Stewart Jack

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BS, Glasgow Caledonian University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus

Associate of Applied Science Degree Requirements

Fall Semester I

		Lec.	Lab.	Credit
CSC-110	Introduction to Computers	3	0	3
GRA-140	Digital Imaging	2	2	3
GRA-175	Graphic Design Principles	3	0	3
SMM-108	Social Media Engagement	2	2	3
ENG-105	Composition I <i>or</i>	3	0	3
ENG-111	Technical Writing	3	0	3
		<u>13</u>	<u>4</u>	<u>15</u>

Spring Semester I

GRA-158	Web Multimedia	2	2	3
GRA-166	Web Animations	2	2	3
MKT-121	Digital Marketing	3	0	3
WDV-101	Intro HTML and CSS	2	2	3
ART-120	2-D Design <i>or</i>	2	2	3
ART-133	Drawing <i>or</i>	2	2	3
ART-186	Digital Photography <i>or</i>	3	0	3
ENG-221	Creative Writing	3	0	3
HUM-114	Multicultural Perspectives	3	0	3
		<u>14-15</u>	<u>8</u>	<u>18</u>

Summer Session

MAT-702	Introduction to Math Apps	2	2	3
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Diploma Total **36**

Web Design Diploma Awarded

Fall Semester II

CIS-125	Intro to Programming Logic w/Language	2	2	3
CIS-332	Database and SQL	2	2	3
GRA-299	Electronic Portfolio	2	2	3
NET-142	Network Essentials	3	0	3
WDV-120	Interface Design	2	2	3
		<u>11</u>	<u>8</u>	<u>15</u>

Spring Semester II

BUS-150	E-Commerce	3	0	3
NET-825	Internet/Web Internship	0	15	3.7
WDV-132	Mobile Application Development	2	2	3
WDV-341	Intro PHP	2	2	3
ART-120	2-D Design <i>or</i>	2	2	3
ART-133	Drawing <i>or</i>	2	2	3
ENG-221	Creative Writing	3	0	3
		<u>7-8</u>	<u>17-19</u>	<u>12.7</u>

Program Total **69.7**

Interactive and Social Media Marketing – 23281

West Burlington Campus

Associate of Applied Science Degree Requirements

Fall Semester I		Lec	Lab.	Credit
CSC-110	Intro to Computers	3	0	3
ENG-105	Composition I	3	0	3
GRA-137	Digital Design	2	2	3
GRA-175	Graphic Design Principles	3	0	3
MAT-110	Math for Liberal Arts <i>or</i>	3	0	3
MAT-156	Statistics	3	0	3
SMM-108	Social Media Engagement	2	2	3
		<u>16</u>	<u>4</u>	<u>18</u>
Spring Semester I				
ART-184	Photography	2	2	3
GRA-275	Advanced Graphic Design	2	2	3
MKT-121	Digital Marketing	2	2	3
MMS-111	Video Production	1	4	3
WDV-101	Intro HTML & CSS	2	2	3
		<u>9</u>	<u>12</u>	<u>15</u>
Summer I				
BUS-140	Small Business Start-up	2	0	2
Fall Semester II				
GRA-140	Digital Imaging	2	2	3
GRA-173	Typography	3	0	3
MKT-150	Principles of Advertising	3	0	3
SMM-220	Navigating the Media Minefield	3	0	3
PSY-111	Intro to Psychology <i>or</i>	3	0	3
SOC-115	Social Problems <i>or</i>	3	0	3
SOC-120	Marriage & Family	3	0	3
SPC-112	Public Speaking	3	0	3
		<u>17</u>	<u>2</u>	<u>18</u>
Spring Semester II				
GRA-127	Illustrator I	2	2	3
GRA-158	Web Multimedia	2	2	3
GRA-166	Web Animations	2	2	3
GRA-190	Electronic Media Projects	1	4	3
GRA-932	Internship	0	15	3.7
		<u>7</u>	<u>25</u>	<u>15.7</u>

Program Total 68.7

The Interactive & Social Media Marketing program prepares students with the necessary skills and knowledge to begin working in various pre-press/pre-media positions within the printing industry. The curriculum includes classroom and laboratory instruction, as well as internship experience. Students receive instruction in the following areas: design/layout, typography, graphics, and pre-flighting. Internships can be arranged in the printing, publishing, and marketing industries, or other businesses that utilize Social Media Marketing.

Students completing the curriculum will receive an AAS.

This curriculum replaces the Graphic Communications ASCO previously offered.

Where will this take me?

- Graphic Designer
- Marketing Assistant
- Typographer
- Pre-press/Graphic Design Specialist
- Print or Electronic Media Copywriter
- Public Relations Assistant

Instructor and Staff

Carlene Woodside
 Professor - Interactive and Social Media Marketing
 (319) 208-5000 x5201
 Email: cwoodside@scciowa.edu
 AAS, Carl Sandburg College
 BS, Western Illinois University
 MBA, Western Illinois University

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaaid/finaid/gainemp.aspx>

Medical Assistant – 26391

The Medical Assistant Program prepares students for employment in a private physician's office, clinic, hospital, and health related agencies.

Where will this take me?

Medical Assistant
 Medical Records Manager
 Medical Secretary

Instructor and Staff

Debra Shaffer
 Instructor - Medical Assistant /Program
 Coordinator
 (319) 208-5000 x5213
 Email: dshaffer@scciowa.edu
 AAS, Mount St. Clare College
 ADN, Southeastern Community College

Megan Massner
 Instructor - Medical Assistant
 (319) 208-5000 x5203
 Email: mmassner@scciowa.edu
 Diploma, SCC

Carla Pilkington
 Assistant Professor - Administrative
 Assistant/Medical
 Coding & Billing
 (319) 208-5000 x1986
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 Diploma & AA, SCC
 BA, Buena Vista Univ., Storm Lake, IA
 Additional study: UNI, Cedar Falls, IA

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington (Keokuk Campus offers selected courses.)

Admission standards apply to this program. Please contact Enrollment Services for more details.

- A. COMPASS reading score of 81, or ACT score of 19
- B. COMPASS numerical score of 50, or ACT score of 19
- C. 35 net words per minute on a typing test
- D. Standardized placement scores must be current (completed within 24 months) at the time of enrollment.
- E. Satisfy "Essential Functions" guidelines.
- F. Students will be required to pass a mandatory background check and drug screening.
- G. Students will be required to submit (at their own expense) a completed physical examination form and immunizations.
- H. Current certification in Basic Life Support - Healthcare Provider**
- I. Current certification of Mandatory Reporter - Adult & Child**
- J. Return of Handbook consent forms as directed in orientation.

** Each of the certifications can be obtained at Southeastern Community College. Students should work with an enrollment specialist for the appropriate courses and dates to obtain these certifications.

The program is three semesters in length conducted over a period of 11 months. Educational development of each student is directed toward the application of accurate knowledge in practical situations, making judgments, applying reason, thinking independently and engaging in problem solving. The program normally begins in the fall and continues through the summer months when the student gains supervised clinical experience in a physician's office. Upon successful completion of the program, the graduate is eligible to write the national certification examination for certified medical assistants administered by the American Association of Medical Assistants.

Expectations of the Medical Assistant Program are to prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skill), and affective (behavior) learning domains.

The SCC Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Program (www.caahep.org) upon the recommendation of Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Program
 25400 US Highway 19 North, Suite 158, Clearwater, Florida 33763.
 Telephone: (727) 210-2350 www.caahep.org

All health career programs require students to earn a grade of "C" (2.0) or above in all coursework within the program. All other eligibility requirements must be met.

Requirements for Medical Assistant Diploma

Fall Semester		Lec.	Lab.	Credit
BIO-163	Essentials of Anatomy and Physiology	3	2	4
HSC-114	Medical Terminology	2	2	3
MAP-121	Administrative Procedures I: Med Office	2	4	4
MAP-128	Introduction to Electronic Health Records	1	2	2
MAP-364	Clinical Procedures for Medical Office I	3	8	7
MAP-431	Human Relations	1	0	1
		<u>12</u>	<u>18</u>	<u>21</u>
Spring Semester				
HIT-211	Basic Medical Insurance & Coding	2	2	3
MAP-122	Administrative Procedures II: Med Office	2	2	3
MAP-369	Clinical Procedures for Medical Office II	4	6	7
MAP-370	Specialty Clinical Procedures	2	4	4
MAP-401	Medical Law and Ethics	1	0	1
MAP-532	Human Body: Health and Disease	3	0	3
		<u>14</u>	<u>14</u>	<u>21</u>
Summer Session				
MAP-602	Clinical Externship Seminar	1	0	1
MAP-615	Clinical Externship	0	20	5
		<u>1</u>	<u>20</u>	<u>6</u>
Program Total				48

Medical Coding and Billing – Provider Emphasis – 80007

West Burlington (*Keokuk Campus offers selected courses.*)

Admission standards apply to this program.

- A. COMPASS reading score of 81, or ACT score of 19
- B. COMPASS numerical score of 40, or ACT score of 17
- C. Students will be required to achieve a 35 wpm typing test.
- D. Satisfy “Iowa Core Performance Standards”.
- E. Standardized placement scores must be current (completed within 24 months) at the time of enrollment.
- F. Must successfully complete a course in Anatomy and Physiology Essentials with a grade of C (2.0) or above.
- G. Students will be required to pass a mandatory background check and drug screening.
- H. Students will be required to submit (at their own expense) a completed physical examination form and immunizations.

Please contact Enrollment Services for more details.

All health career programs require students to earn a grade of “C” (2.0) or above in all coursework within the program. All other eligibility requirements must be met.

Requirements for Medical Coding and Billing Diploma

Prerequisite		Lec.	Lab.	Credit
BIO-163	Essentials of Anatomy & Physiology	3	2	4
Fall Semester				
		Lec.	Lab.	Credit
*CPC-121	Intro. to Medical Procedural Coding	5	1	5.5
*CPC-126	Diagnostic Coding	3	2	4
*CPC-129	Intro. to Medical Insurance & Billing	1	2	2
HSC-114	Medical Terminology	2	2	3
HIT-320	Health Records Management	1	2	2
MAP-431	Human Relations	1	0	1
		14	7	17.5
Spring Semester				
*CPC-131	Medical Insurance & Billing II	2	2	3
*CPC-150	Medical Procedural Coding	3	0	3
*CPC-160	Applications of Procedural Coding	0	4	2
ENG-131	Business English	3	0	3
MAP-401	Medical Law and Ethics	1	0	1
MAP-532	Human Body: Health and Disease	3	0	3
		12	6	15
Summer Session				
*CPC-810	Medical Coding and Billing Externship	0	10	2.5
*CPC-945	Medical Coding and Billing Seminar	1	0	1
		1	10	3.5
Program Total				40

**Admittance to Program required to be enrolled in these courses.*

All courses must be passed with a grade of “C” (2.0)

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC’s financial aid website at <http://www.scciowa.edu/admissions/costaidd/finaid/gainemp.aspx>

The Medical Coding and Billing-Physician Emphasis Diploma provides the latest information related to medical coding, chart auditing and insurance reimbursement.

The Medical Coding and Billing Diploma option prepares the student for employment in a private physician’s office, clinic, and health-related agencies. The role includes specific knowledge and skills necessary for coding and billing of insurance claims for medical services provided. The student will be trained in current diagnostic coding, CPT and HCPCS coding languages which conforms with HIPAA transaction standards for billing and insurance. Medical coding and billing is a growing field; the demand for individuals with coding skills is increasing as new procedures and regulations are being implemented by government and insurance groups.

This course is affiliated with the American Academy of Professional Coders (CPC). Upon completion of the course students will be eligible to sit for certification as a Certified Professional Coder (CPC).

Where will this take me?

Medical Coding & Billing
Auditor/Compliance
Insurance Specialist

Instructor and Staff

Debra Shaffer
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ADN, Southeastern Community College

Megan Massner
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Diploma & AA, SCC
BA, Buena Vista Univ., Storm Lake, IA
Additional study: UNI, Cedar Falls, IA

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC’s career exploration website at <https://scciowa.emsicareercoach.com>

Medical Scribe – 80044

The Medical Scribe is trained to input information into the electronic medical record at the direction of a physician or practitioner, as the provider assesses and examines the patient. The scribe will record the patient's history, physician's interaction with the patient, procedures, lab results and other information. The curriculum teaches the skills required for entry-level employment as a medical scribe, which includes anatomy and physiology, medical terminology, human relations, medical law and ethics, HIPAA guidelines and standards, medical records documentation, introduction of electronic health records, and basic principles of billing, coding and reimbursement. The trained medical scribe will allow the provider to focus on the care of the patient, which then increases their productivity, continuity of care and patient satisfaction.

Where will this take me?

- Medical Scribe in a physician's office/clinic
- Medical Scribe in the Emergency Room
- Medical Scribe in a hospital setting

Instructor and Staff

Debra Shaffer

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 AAS, Mount St. Clare College
 ADN, Southeastern Community College

Megan Massner

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 Diploma, SCC

Carla Pilkington

Assistant Professor - Administrative Assistant/Medical Coding & Billing
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 Diploma & AA, SCC
 BA, Buena Vista Univ., Storm Lake, IA
 Additional study: UNI, Cedar Falls, IA

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington

Admission standards apply to this program.

- A. COMPASS reading score of 81, or ACT score of 19
- B. COMPASS numerical score of 50, or ACT score of 19
- C. Students will be required to achieve a 35 nwpm typing test.
- D. Satisfy "Iowa Core Performance Standards".
- E. Standardized placement scores must be current (completed within 24 months) at the time of enrollment.
- F. Students will be required to pass a mandatory background check and drug screening.
- G. Students will be required to submit (at their own expense) a completed physical examination form and required immunizations.

Please contact Enrollment Services for more details.

All health career programs require students to earn a grade of "C" (2.0) or above in all coursework within the program. All other eligibility requirements must be met

Requirements for Medical Scribe Certificate

Fall Semester		Lec.	Lab.	OJT	Credit
BIO-163	Essentials of Anatomy and Physiology	3	2		4
HSC-141	Pharmaceutical Applications	1	0		1
HSC-114	Medical Terminology	2	2		3
MAP-431	Human Relations	1	0		1
MAP-401	Medical Law and Ethics	1	0		1
MTR-157	Medical Documentation for Scribes	1	2	4	3
		9	6	4	13

Program Total 13

All courses must be passed with a grade of "C" (2.0)

Medical Scribe Certificate Awarded

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaidd/financial/gainemp.aspx>

Modern Food Production, Agriculture & the Environment – 40021

West Burlington Campus

Diploma and Associate of Applied Science Degree Requirements

Fall Semester I

		Lec.	Lab.	Credit
AGA-114	Principles of Agronomy <i>or</i>	2	2	3
AGH-221	Principles of Horticulture	2	2	3
AGB-235	Introduction to Agriculture Markets <i>or</i>	3	0	3
BUS-102	Introduction to Business	3	0	3
AGS-113	Survey of Animal Industry <i>or</i>	2	2	3
AGH-131	Greenhouse Management	3	0	3
AGP-329	Introduction to GPS <i>or</i>	3	0	3
DRF-113	Fundamentals of Technical Drafting	1	4	3
AGC-216	Career Seminar	2	0	2
AGB-336	Agriculture Selling	3	0	3
				17

Spring Semester I

AGA-154	Fundamentals of Soil Science	2	2	3
AGA-390	Introduction to Renewable Resources	3	0	3
Choose 3 of the following courses:				
AGB-331	Entrepreneurship in Agriculture	3	0	3
AGC-420	Issues in Agriculture	3	0	3
AGS-225	Swine Science	3	0	3
AGS-226	Beef Cattle Science	3	0	3
AGM-157	Machinery Management (online)	3	0	3
AGA-376	Integrated Pest Management	2	2	3
Choose 1 of the following courses:				
AGB-331	Entrepreneurship in Agriculture	3	0	3
AGC-420	Issues in Agriculture	3	0	3
AGS-225	Swine Science	3	0	3
AGS-226	Beef Cattle Science	3	0	3
AGM-157	Machinery Management (online)	3	0	3
AGA-376	Integrated Pest Management	2	2	3
Choose 3 of the following courses:				
ENG-105	Composition I	3	0	3
ENG-111	Technical Writing	3	0	3
SPC-112	Public Speaking	3	0	3
				18

Program Total 35

Diploma Awarded

Summer Session

AGC-936	Occupational Experience	0	12	3
Choose 1 of the following courses:				
MAT-127	College Algebra and Trigonometry <i>or</i>	5	0	5
MAT-156	Statistics <i>or</i>	3	0	3
MAT-702	Introduction to Math Applications	2	2	3
				3-5

Students in SCC's Modern Food Production, Agriculture and the Environment have the opportunity to prepare for a lifetime of learning through classroom and internship positions limited only by students' initiative and imagination. This program prepares students to serve the food production and processing industries through operation of feed mills, fertilizer plants, elevators, retail farm supply stores and farm equipment dealers. The program is also designed to provide improved skills in the areas of crop and livestock production, agriculture equipment and farm business management. This program offers a diploma and degree in Modern Food Production, Agriculture and the Environment.

Students wanting to incorporate business classes into livestock or crop areas would also benefit greatly from the certificate. Students will be expected to complete four courses: one each from the areas of Agronomy, Animal Science and Business and another Agriculture elective.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaidd/financial/gainemp.aspx>

Modern Food Production, Agriculture & the Environment – cont.

Where will this take me?	Fall Semester II				
Animal Science Technician	AGB-470	Farm Records, Accounts & Analysis and	3	0	3
Farm and/or Feedlot Owner/Operator	AGB-330	Farm Business Management	3	0	3
Fruit and Vegetable Grower		Complete a minimum of 6 credit hours from the following:			
Grain and/or Livestock Farmer	AGA-158	Soil Fertility	3	0	3
Livestock Breeding Manager	AGA-211	Grain and Forage Crops	2	2	3
Specialty Animal Producer	AGN-130	Soil & Water Conservation	2	2	3
	AGH-112	Introduction to Turf Grass Management	3	0	3
Instructor and Staff	AGB-437	Commodity Marketing	3	0	3
Adam Raub	AGB-466	Agriculture Finance	3	0	3
Professor - Agriculture	AGS-331	Animal Reproduction	3	0	3
(319) 208-5000 x5103	AGT-250	Food and Biosecurity Issues	1	0	1
Email: araub@scciowa.edu	AGS-270	Foods of Animal Origin	3	0	3
BS, Western Illinois University	AGS-319	Animal Nutrition	3	0	3
MBA, St. Ambrose University	AGC-937	Occupational Experience	0	12	3
Sabrina Pidgeon		Choose 1 of the following courses:			
Instructor - Agriculture Management	MAT-110	Math for Liberal Arts <i>or</i>	3	0	3
(319) 208-5000 x5104	MAT-127	College Algebra and Trigonometry <i>or</i>	5	0	5
Email: spidgeon@scciowa.edu	MAT-156	Statistics <i>or</i>	3	0	3
BS, Iowa State University	MAT-702	Introduction to Math Applications <i>or</i>	2	2	3
	PHS-165	Introduction to Meteorology <i>or</i>	3	0	3
Career Outlook	PHY-106	Survey of Physics	3	2	4
For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at https://scciowa.emsicareercoach.com					15-17
	Spring Semester II				
		Complete minimum of 12 credit hours from the following:			
	AGS-216	Equine Science	3	0	3
	AGH-260	Fruits and Vegetables	2	0	2
	AGN-244	Wildlife Management	2	2	3
	AGM-200	Farm Welding	1	2	2
	AGM-155	Farm Equipment Management	2	0	2
	ENV-145	Conservation Biology	3	2	4
	AGS-242	Animal Health	3	0	3
	ELE-130	Home and Farm Electricity	1	2	2
	AGB-210	Agricultural Law	2	0	2
		Choose 2 of the following courses:			
	HUM-287	Leadership Development <i>or</i>	3	0	3
	PSY-102	Human and Work Relations <i>or</i>	3	0	3
	PSY-111	Introduction to Psychology <i>or</i>	3	0	3
	SOC-110	Introduction to Sociology <i>or</i>	3	0	3
	SOC-114	Conflict Resolution in the Workplace <i>or</i>	3	0	3
	ECN-130	Principles of Micro-Economics	3	0	3
					18
		<i>Program Total</i>			71-75

Nursing – Practical Nursing Diploma – 26131

West Burlington Campus-Day and Evening Track

Keokuk Campus-Day Track

There are admission standards and application deadlines dates apply to this program. Enrollment Services for details.

- A. High school diploma or equivalency
- B. Minimum ACT reading score of 19 or; or COMPASS of 83; or Accuplacer 90
- C. Minimum ACT mathematical score of 18; or COMPASS pre-algebra score of 50; or ALEKS score of 24
- D. Minimum ACT English score of 17; or COMPASS writing score of 62; or Accuplacer of 98

Students are required to attend nursing orientation and complete the following requirements once admitted to the program:

- Active LPN licensure-unrestricted
- Completed Physical Examination Form and required immunizations for healthcare providers
- Current Iowa Certification as a Certified Nursing Assistant**
- Current certification in CPR-Basic Life Support for Healthcare Providers**
- Current certification in Mandatory Reporter-Adult & Child Abuse**
- Signed Confidentiality Agreement

Students will be required to pass a mandatory background check and drug screening.

***Certifications may be obtained at Southeastern Community College. Students should work with an Enrollment Specialist for the appropriate courses and dates to obtain these certifications.*

All health career programs require students to earn a grade of “C” (2.0) or above in all coursework within the program. All other eligibility requirements must be met.

Requirements for Practical Nursing Diploma

Prerequisite		Lec.	Lab.	Clinical	Credit
BIO-168	Human Anatomy & Physiology I	3	2	0	4
BIO-173	Human Anatomy & Physiology II	3	2	0	4
		<u>6</u>	<u>4</u>	<u>0</u>	<u>8</u>
Summer Semester					
ENG-105	Composition I	3	0	0	3
PNN-160	Intro to Nursing Practice	2	0	0	2
PNN-220	Pharmacology for Nursing I	2	0	0	2
		<u>7</u>	<u>0</u>	<u>0</u>	<u>7</u>
Fall Semester					
BIO-186	Microbiology	3	2	0	4
PNN-534	Medical-Surgical Nursing I	8	1	12	12.5
PSY-121	Developmental Psychology	3	0	0	3
		<u>14</u>	<u>3</u>	<u>12</u>	<u>19.5</u>
Spring Semester					
PNN-311	PN Issues and Trends	1	0	0	1
PNN-535	Medical-Surgical Nursing II	8	0	12	12
		<u>9</u>	<u>0</u>	<u>12</u>	<u>13</u>
Program Total					47.5

PN Diploma awarded

Southeastern Community College offers two nursing degree options and is designed as a ladder program.

The nursing program is fully accredited by the Iowa Board of Nursing and the Iowa Department of Education.

Students complete the first year of nursing and obtain the Practical Nursing Diploma and are eligible to take the NCLEX-PN licensure exam and become a Licensed Practical Nurse (LPN). Students awarded the PN diploma and pass the licensure examination may work as an LPN while pursuing the Associate of Applied Science in Nursing (ADN) to become a Registered Nurse.

The majority of the nursing workforce today consists of Licensed Practical Nurses (LPN's) and Registered Nurses (RN's). Those interested in nursing should be caring and compassionate, responsible and detail-oriented and have the desire to work with patients and families of all ages. LPN's are primarily employed in long-term care settings, healthcare provider offices, clinics and home care agencies.

Preparatory Nursing

Review course offerings with an Enrollment Specialist before enrolling.

Students prep for Nursing by completing pre-requisite courses before enrolling in the PNN courses.

Human Anatomy & Physiology I
Human Anatomy & Physiology II

It is recommended that the courses below are completed prior to enrollment in the nursing program.

Microbiology
Developmental Psychology
English Composition I
Introduction to Psychology
Introduction to Sociology

Instructor and Staff

Kristi Schroeder -
Director of Nursing
Interim Dean Health Education
(319) 208-5000 x5100
Email: kschoeder@scciowa.edu
RN Diploma, Augustana Hospital School of Nursing
BSN & MSN, University of Phoenix

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

Nursing – Associate Degree Nursing (ADN) – 26131

The Associate Degree in Nursing builds upon the foundations of practical nursing. The associate degree nurse is responsible for the management of patient and family nursing care in which the needs are more complex. The associate degree nurse works in a variety of healthcare settings such as hospitals, surgery centers, skilled care facilities and community and public health settings.

Preparatory Nursing

Review course offerings with an Enrollment Specialist before enrolling.

Students prep for Nursing by completing pre-requisite courses before enrolling in the PNN courses.

- Human Anatomy & Physiology I
- Human Anatomy & Physiology II

It is recommended that the courses below are completed prior to enrollment in the nursing program.

- Microbiology
- Developmental Psychology
- English Composition I
- Introduction to Psychology
- Introduction to Sociology

Instructor and Staff

Kristi Schroeder -

- Director of Nursing
- Interim Dean Health Education
- (319) 208-5000 x5100
- Email: kschroeder@scciowa.edu
- RN Diploma, Augustana Hospital
- School of Nursing
- BSN & MSN, University of Phoenix

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington Campus-Day and Evening Track

Keokuk Campus-Day Track

There are admission standards and application deadlines dates apply to this program. Enrollment Services for details.

- A. High school diploma or equivalency
- B. Minimum ACT reading score of 19 or; or COMPASS of 83; or Accuplacer 90
- C. Minimum ACT mathematical score of 18; or COMPASS pre-algebra score of 50; or ALEKS score of 24
- D. Minimum ACT English score of 17; or COMPASS writing score of 62; or Accuplacer of 98

Students are required to attend nursing orientation and complete the following requirements once admitted to the program:

- Active LPN licensure-unrestricted
- Completed Physical Examination Form and required immunizations for healthcare providers
- Current certification in CPR-Basic Life Support for Healthcare Providers**
- Current certification in Mandatory Reporter-Adult & Child Abuse**
- Signed Confidentiality Agreement

Students will be required to pass a mandatory background check and drug screening.

***Certifications may be obtained at Southeastern Community College. Students should work with an Enrollment Specialist for the appropriate courses and dates to obtain these certifications.*

Students who successfully completed practical nursing coursework may be eligible for admission into the associate degree program.

All health career programs require students to earn a grade of “C” (2.0) or above in all coursework within the program. All other eligibility requirements must be met.

Associate of Applied Science Degree Requirements for ADN Nurse

Summer Semester		Lec.	Lab.	Clinical	Credit
ADN-145	Role Transition	1	0	0	1
ADN-221	Pharmacology II	2	0	0	2
PSY-111	Introduction to Psychology	3	0	0	3
		<u>6</u>	<u>0</u>	<u>0</u>	<u>6</u>
Fall Semester					
ADN-641	Nursing III	8	1	18	14.5
SOC-110	Introduction to Sociology	3	0	0	3
		<u>11</u>	<u>1</u>	<u>18</u>	<u>17.5</u>
Spring Semester					
ADN-311	RN Issues & Trends	1	0	0	1
ADN-642	Nursing IV	8	0	18	14
		<u>9</u>	<u>0</u>	<u>18</u>	<u>15</u>
<i>Program Total</i>					86

ADN Degree awarded

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaidd/finaid/gainemp.aspx>

Respiratory Care Program – 80025

West Burlington Campus

Admission standards apply to this program.

- A. ACT reading score of 19; or COMPASS of 83
- B. ACT numerical score of 18; or COMPASS of 50
- C. 80% or higher on the interdepartmental math exam.
Students who do not meet the 80% score should be referred to MAT-080, Math Skills I. After successful completion of the math course, the student will be expected to score 80% or above on the interdepartmental math exam in three attempts or less.
- D. Minimum GPA of C (2.0) for at least 12 semester hours of baccalaureate credit OR either an AA, AAS or Baccalaureate degree with a minimum of 2.0 GPA OR upper half of high school graduating class and ACT composite of 20.

Students are expected to complete and provide documentation of the following enrollment requirements prior to beginning the first respiratory course:

- Completed Physical Examination Form
- Signed Confidentiality Agreement.
- Copy of current certification in Basic Life Support—Healthcare Providers
- Complete criminal background check.
- Copy of current certification in Mandatory Reporter
- Pass drug screening.
- Proof of health insurance.

All health career programs require students to earn a grade of “C” (2.0) or above in all coursework within the program. All other eligibility requirements must be met.

Associate of Applied Science Degree Requirements

Prerequisites		Lec.	Lab.	Clinical	Credit
HSC-114	Medical Terminology	2	2	0	3
CHM-122	Introduction to General Chemistry	3	2	0	4
		5	4	0	7
Fall Semester I					
*BIO-163	Essentials of Anatomy & Physiology	3	2	0	4
*BIO-186	Microbiology	3	2	0	4
*ENG-105	Composition I	3	0	0	3
RCP-230	Intro to Respiratory Care	3	4	0	5
		12	8	0	16
Spring Semester I					
RCP-330	Respiratory Care II	4	2	0	5
RCP-350	Pulmonary Pathology	3	0	0	3
RCP-751	Respiratory Care Clinic I	0	0	15	5
SPC-101	Fundamentals of Oral Communication	3	0	0	3
		10	2	15	16
Summer Session					
PSY-111	Introduction to Psychology	3	0	0	3
RCP-470	Cardiac Monitoring	1.5	0	0	1.5
RCP-524	Respiratory Care III	4.5	1	0	5
RCP-755	Respiratory Care Clinic II	0	0	4	2
		9	1	4	11.5
Fall Semester II					
RCP-440	Cardio/Pulmonary Diagnostics	2	0	0	2
RCP-450	Respiratory Care IV	2.5	1	0	3
RCP-620	Neonatal/Pediatric Respiratory Care	4	2	0	5
RCP-761	Respiratory Care Clinic III	0	0	15	5
		8.5	3	15	15
Spring Semester II					
RCP-767	Respiratory Care Clinic IV	0	0	24	8
RCP-810	Respiratory Care Professional	2	0	0	2
RCP-910	Respiratory Care RRT Review	2	0	0	2
		4	0	24	12

*Courses may be taken before beginning the program.

Program Total 77.5

For more information about our credentialing pass rates, graduation rates, and other important information, please visit the CoARC website at <http://www.coarc.com/47.html>

SCC’s Respiratory Care program was created to meet the need for respiratory care professionals locally and in the surrounding communities.

Respiratory Care is a specialty field in the health occupation career field. Simply stated, “It deals with everything to do with the heart and lungs from babies through adulthood.”

This field is growing rapidly and has a great demand for graduates with an associate degree in respiratory care. Respiratory care ranks among the Top 20 fastest growing occupations for the 21st century.

This two-year program includes clinical studies. These clinical studies consist of hands-on training that will take place in rotating hospitals within a 75-mile radius. Graduates of this program will be able to initiate, conduct, or modify respiratory care techniques in emergency and non-emergency settings.

Upon successful graduation from the Advanced Respiratory Care Program, the student will be eligible to sit for the following credentialing exams offered by the National Board of Respiratory Care, NBRC: National Certification Exam and the National Registry. Upon satisfactory completion, students can obtain the Registered Respiratory Therapist credential. The respiratory care program is a two-year advanced level therapist program and is accredited by the Commission on Accreditation for Respiratory Care (www.coarc.com). Commission on Accreditation for Respiratory Care 1248 Harwood Road Bedford, Texas 76021-4244, (817) 283-2835

Instructor and Staff

Stacy Lewis-Sells

Professor - Respiratory Care/
Program Coordinator

(319) 208-5000 x5204
Email: ssells@scciowa.edu

AAS, Kirkwood Community College
BHS, University of Missouri-Columbia
Ed.M., University of Illinois
Champaign-Urbana

Suellen Carmody-Menzer

Associate Professor - Respiratory Care/
Clinical Coordinator
(319) 208-5000 x5214

Email: scarmody-menzer@scciowa.edu

AAS, Kirkwood Community College

BBA, American InterContinental

University

MBA, St. Ambrose University

Career Outlook

Visit SCC’s career exploration website at <https://scciowa.emsicareercoach.com>

Skilled Trades Degree

The Skilled Trades degree starts with the completion of an apprenticeship training program for which the student will be granted the equivalent of 45 credits. The apprenticeship program must be approved by the U.S. Department of Labor Bureau of Apprenticeship and Training. The final 18 credits of this degree will round out the students' educational experience by providing general education background in areas such as communications, social sciences and humanities, mathematics and science, computers and business.

Where will this take me?

This program is designed to assist students who have completed a technical apprenticeship to obtain a college degree. They will then be eligible to advance into supervisory and management positions.

Program Contact

Susan Dunek

Interim Dean for Career and
 Technical Education
 (319) 208-5000 x5193
 Email: sdunek@scciowa.edu

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

West Burlington and Keokuk Campuses

Associate of Applied Science Degree Requirements

	Credit
Bureau of Apprenticeship and Training (BAT)- approved apprenticeship hours	30
BAT-approved on-the-job-training (OJT)	15
General Education Elective courses (100 level or above)	15
<ul style="list-style-type: none"> • Communications - 1 course • Social Sciences and/or Humanities - 1 course • Mathematics and/or Science - 1 course • Additional course from the 3 areas above • Computer course 	
Business Elective course	3
	63
<i>Program Total</i>	<i>63</i>

The student must meet SCC's residency requirements (minimum of 15 of the last 20 semester credit hours earned in classes from SCC).

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costa/aid/finaid/gainemp.aspx>

West Burlington Campus

Diploma and Associate of Applied Science Degree Requirements

Fall Semester I		Lec.	Lab.	Credit
MAT-702	Introduction to Math Applications	2	2	3
WEL-130	Oxyacetylene Welding	1	2	2
WEL-160	Arc Welding I (SMAW)	2	6	5
WEL-186	GMAW	2	4	4
WEL-192	Gas Tungsten Arc Welding	2	4	4
		9	18	18

Spring Semester I		Lec.	Lab.	Credit
ENG-111	Technical Writing	3	0	3
WEL-111	Welding Blueprint Reading	2	2	3
WEL-164	Arc Welding II (SMAW)	1	6	4
WEL-172	Advanced Shielded Metal Arc Welding II	1	6	4
WEL-197	Gas Tungsten Arc Welding-Tube	1	4	3
		8	18	17

Program Total 35

Diploma awarded

Summer Session

SOC-115	Social Problems	3	0	3
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Fall Semester II

DRF-113	Fundamentals of Technical Drafting	1	4	3
SDV-153	Pre-employment Strategies	2	0	2
SOC-114	Conflict Resolution in the Workplace	3	0	3
WEL-182	FCAW	1	2	2
WEL-198	Adv. Gas Metal Arc Welding-Aluminum	1	2	2
WEL-292	Pipe Welding/SMAW-Uphill	1	6	4
		9	14	16

Spring Semester II

MGT-130	Principles of Supervision	3	0	3
PSY-102	Human and Work Relations	3	0	3
WEL-235	Layout & Fabrication	0	8	4
WEL-720	Introduction to Robotic Arc Welding	1	2	2
		7	10	12

Program Total 66

SCC's Welding Program is designed to give students a solid foundation in the principles, practices and usages of both gas and electric welding in the industrial setting. Additionally, ample practice is given in the welding skills, brazing and flame cutting. Students receive instruction on the latest types of equipment including oxyacetylene, shielded metal arc, gas tungsten arc, gas metal arc and thermoplastic welding. Instruction emphasizes production fabrication techniques, maintenance and repair procedures, blueprint reading, properties of metals, inspection methods, among other aspects of the welding trade. Many welding courses are offered at times other than the traditional term dates, including nights.

Where will this take me?

Construction Welder
Industrial Welder
Maintenance Welder
Pipe Welder

Instructor and Staff

Bill White
Assistant Professor - Welding
(319) 208-5000 x5181
Email: bwhite@scciowa.edu

Mike Kaczinski
Assistant Professor - Welding
(319) 208-5000 x5207
Email: mkaczinski@scciowa.edu
AWS Certification of Welding Educators

Career Outlook

For details on job outlook, related careers and median income of what you could earn after completing this program, visit SCC's career exploration website at <https://scciowa.emsicareercoach.com>

Course Descriptions

A brief narrative description of each course offered by Southeastern Community College is found in this section. Descriptions also contain the course number, course title, number of lecture and laboratory hours, and the number of semester hours of credit granted upon successful completion of each course.

The Iowa community colleges have developed a systematic numbering system for all the credit courses they offer. The goal of this common course numbering system is to facilitate transfer and articulation processes for community college students in Iowa.

ABC Discipline prefix of program or subject 123 000-099 developmental courses 100-899 courses intended to meet specific requirements for certificates, diplomas, and degrees in career and technical and transfer programs 900-999 generic focus courses such as special topics, OJT, internships	CSC Computer Science DRA Drama DRF Computer Aided Design Technology ECE Early Childhood Education ECN Economics EDU Education EGT Engineering Technology ELE Electrical Technology ELT Electronics EMS Emergency Medical Services ENG English Composition ENV Environmental Science ESI Intensive - English as a Second Language ESL Non-Intensive - English as a Second Language FIN Finance FLS Foreign Language – Spanish GEO Geography GRA Graphic Communications HEQ Heavy Equipment HIS History HIT Health Information Technology HSC Health Sciences HSV Human Services HUM Humanities IND Industrial Technology JOU Journalism LIT Literature MAP Medical Assistant MAT Mathematics MFG Manufacturing MGT Management MKT Marketing MMS Mass Media Studies MTR Medical Transcription MUA Music – Applied MUS General Music NET Computer Networking PEA Physical Education Activities PEC Coaching Officiating PEH General Phys Ed & Health	PET Physical Education Training PEV Intercollegiate Physical Ed PHI Philosophy PHS Physical Science PHY Physics PNN Practical Nursing POL Political Science PSY Psychology RCP Respiratory Therapy RDG Reading REL Religion SCI Science SDV Student Development SMM Social Media & Marketing SOC Sociology SPC Speech WDV Web Development WEL Welding
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Key to Course Prefixes

ACC Accounting
ADM Administrative Assistant
ADN Associate Degree Nursing
AGA Agriculture – Agronomy
AGB Agriculture – Farm Management
AGC Agriculture – Comprehensive – Misc.
AGH Agriculture – Horticulture
AGM Agriculture – Mechanics
AGN Agriculture – Natural Resources and Forestry
AGP Agriculture – Precision Ag
AGS Agriculture – Animal Science
AGT Agriculture – Technology
ANI Animation
ARC Architectural
ART Art
AUT Automotive Technology
BCA Business Computer Applications
BIO Biology
BUS Business
CAD Computer Aided Drafting
CFR Computer Forensics
CHM Chemistry
CIS Computer Programming
COM Communication
CON Construction
CPC Certified Professional Coder
CRJ Criminal Justice
CRR Collision Repair/Refinish

Course Prerequisites

The instructor of any course (other than health careers classes and ENG-105) may waive any stated prerequisite of the course when, in the judgment of the instructor, the student can demonstrate sufficient evidence to justify enrollment.

Course Offerings

If there is sufficient demand, courses may be offered more frequently than announced. Insufficient demand or unforeseen staffing problems may result in the cancellation of announced offerings. Southeastern Community College reserves the right to alter the course offerings and/or course content without further notice. Students are advised to consult the schedule of classes available in Enrollment Services.

ACC Accounting

ACC-131 Principles Of Accounting I

Lecture 4 Lab 0 Credit 4

This first course covering the principles of accounting introduces the basic terms, concepts, and procedures of the double-entry system of accounting. The course is intended for students who will major in accounting or have chosen a career which requires extensive use of accounting information. During the course, the focus will be on the completion of the accounting cycle, including the preparation of journal entries, posting to the ledger, and the preparation of adjusting entries, financial statements, and closing entries at the end of the accounting period. Specific attention will also be given to special journals and subsidiary ledgers, the information needed to account for merchandising businesses, and the special accounting procedures related to cash, receivables, payables, and systems of control. Prerequisite: A COMPASS Pre-Algebra score of 50 or higher, COMPASS Algebra score of 36 or higher, ACT Math score of 19 or higher, or equivalent AND COMPASS Reading score of 61 or higher, ACT Reading score of 15 or higher, or equivalent.

ACC-132 Principles Of Accounting II

Lecture 4 Lab 0 Credit 4

A continuation of Principles of Accounting I, the second principles of accounting course will proceed through the recognition, valuation, and financial reporting requirements for merchandise inventory, fixed assets, intangibles, payroll, current liabilities, and long-term liabilities, before looking at the specific accounting issues related to corporations and partnerships. The course will conclude with coverage of the Statement of Cash Flows and financial statement analysis. Prerequisite: ACC-131.

ACC-142 Financial Accounting

Lecture 3 Lab 0 Credit 3

An introduction to financial accounting theory and practice with emphasis on the use and interpretation of financial statements.

ACC-146 Managerial Accounting

Lecture 3 Lab 0 Credit 3

An introduction to managerial accounting and practice with emphasis on the sources and uses of data for decisions. Prerequisite: ACC-142.

ACC-161 Payroll Accounting

Lecture 3 Lab 0 Credit 3

Payroll accounting emphasizes the methods of computing wages and salaries, the methods of keeping records, and the preparation of

government reports. Extensive coverage of federal and state laws impacting payroll accounting is provided. During the course of the semester, students will explore numerous manual and computerized payroll systems. Prerequisite: ACC-131 or equivalent.

ACC-221 Cost Accounting

Lecture 3 Lab 0 Credit 3

This introductory course in Cost Accounting is designed as an intensive, practical course in cost accounting procedures. After a preliminary consideration of the three cost elements of material, labor and factory overhead, three concepts are applied to cost gathering procedures for both job-order and process costing. Finally, attention is given to standard costing and analysis of cost factors for decision making by management. Prerequisite: ACC-132 or ACC-146.

ACC-231 Intermediate Accounting I

Lecture 3 Lab 2 Credit 4

This first course in Intermediate Accounting examines the generally accepted accounting principles applied in income determination and balance sheet presentation. The primary purpose is the preparation of financial statements in a meaningful, understandable and adequate manner for the external user. After a preliminary review of the basic accounting process, the content and format of the income statement and balance sheet, the course material will specifically consider the balance sheet classifications of cash, temporary investments, receivables, inventories, plant and intangible assets. Prerequisite: ACC-132 or ACC-142 or equivalent.

ACC-232 Intermediate Accounting II

Lecture 3 Lab 2 Credit 4

A continuation of ACC-231, this course will continue to examine the generally accepted accounting principles as applied to income determination and balance sheet preparation. The course will specifically consider the classification, recognition, and valuation of current liabilities, bonds and other long-term liabilities, stockholders' equity, dividends, dilutive securities and their effect on earnings per share, leases, pensions, and income taxes. The course will conclude with coverage of the Statement of Cash Flows. Prerequisite: ACC-231.

ACC-261 Income Tax Accounting

Lecture 3 Lab 0 Credit 3

Coverage of income tax returns for individuals, including filing requirements, gross income inclusions and exclusions, dependency requirements, itemized deductions, etc.

ACC-311 Computer Accounting

Lecture 3 Lab 0 Credit 3

Studies payroll records and payroll taxes imposed by state and federal agencies. The course will focus on computerized accounting records, including general ledger, accounts receivable, accounts payable, depreciation and payroll systems.

ACC-332 Computer Accounting - Quickbooks

Lecture 2 Lab 0 Credit 2

This course is designed to apply the fundamental accounting principles in a computerized environment by using the text/workbook combined with computerized standard accounting software package. Also electronic spreadsheets will be explored. A prior knowledge of accounting is required and knowledge of Windows will be helpful. It is necessary that each student be able to set aside lab time to complete assignments, either in the computer labs or a similar computer with computerized standard accounting software package. Prerequisites: ACC-131 or ACC-142 or permission of instructor.

ACC-932 Accounting Internship

Lecture 0 Lab 16 Credit 4

Accounting students who have completed the prerequisite courses may use this opportunity to gain practical experience in the field of accounting. Student placement will vary, depending upon availability of internship positions. The specific arrangements for the nature of the work and scheduling of contact hours will be made under the supervision of the employer. Prerequisites: ACC-132, ACC-806, CSC-110, and ENG-105 or equivalents.

ADM Administrative Assistant

ADM-117 Keyboarding And Document Preparation

Lecture 2 Lab 2 Credit 3

A fundamental course in developing keyboarding skills for business and personal use. Students use Microsoft Word to learn proper formatting of office letters and memos, business and academic reports, tables, newsletters, flyers and graphics. Proper keyboarding technique, accuracy and speed building are emphasized.

ADM-120 Advanced Document Production

Lecture 1 Lab 4 Credit 3

Students use Microsoft Word to create office documents and apply advanced formatting and production techniques including mail

merge, header/footer manipulation, report generation and custom formatting. Standard formats of advanced tables, agendas, minutes, itineraries, news releases, resumes, and medical and legal documents are learned, and online collaboration is introduced. This class continues to emphasize proper keyboarding technique, accuracy and speed building.

ADM-133 Business Math & Calculators

Lecture 3 Lab 0 Credit 3

This course will focus on the use of 10-key calculators to review arithmetic fundamentals and solve common business problems, including banking, payroll, weights and measurements, percentage, commissions, discounts, mark-ups, interest, borrowing by business, consumer credit, sales taxes, property taxes, income taxes, and insurance. Prerequisite: COMPASS Pre-Algebra score of 50 or higher, COMPASS Algebra score of 36 or higher, ACT Math score of 19 or higher, or equivalent.

ADM-149 Transcription

Lecture 2 Lab 2 Credit 3

Designed for students in the Office Administration program to develop skills in transcribing various business documents. Prerequisites: ADM-116, ENG-131 or permission of instructor.

ADM-162 Office Procedures

Lecture 3 Lab 0 Credit 3

Duties, responsibilities, and personal qualifications of the office worker are emphasized. Efficient work procedures in completing common office tasks, office environment and personal development are typical areas studied.

ADM-171 Records Management

Lecture 1 Lab 2 Credit 2

This course is designed to familiarize students with alphabetic, numeric, geographic and subject filing systems. Both manual and electronic systems will be utilized. Prerequisite: ADM-114 or CSC-110 or permission of instructor.

ADM-186 Legal Documents

Lecture 1 Lab 2 Credit 2

A specialized course in which legal documents are studied. Emphasis is on creating and completing legal documents electronically. Transcription skills are refined with a concentration on legal documents. Legal terminology is applied throughout the course. Prerequisites: ADM-119, ADM-149.

ADM-212 Medical Documents

Lecture 1 Lab 2 Credit 2

A specialized course in which medical documents are studied. Emphasis is on creating and completing medical documents electronically. Transcription skills are refined with a concentration on medical documents. Medical terminology is applied throughout the course. Prerequisites: ADM-119, ADM-149.

ADM-230 Integrated Office Projects

Lecture 1 Lab 4 Credit 3

This course is designed to enhance and reinforce software skills through project-based activities by extensive use of integrating applications. Students complete projects that represent what is required in an actual business environment. This class will develop teamwork, creativity, decision making and critical thinking skills as will be experienced in the office setting. Software used includes Microsoft Word, Excel, Access, PowerPoint, Publisher and the Internet. Continued emphasis on proper keyboarding technique, accuracy and speed building. Prerequisites: ADM-120 or permission of instructor.

ADM-235 Advanced Integrated Office Projects

Lecture 1 Lab 3 Credit 3

An advanced course to integrate mastery level skills using Microsoft Word, Excel, Access, Outlook, PowerPoint, Publisher, the Internet and voice recognition software. Students work in an office-style environment requiring self-discipline and resourcefulness to manage communications, create effective presentations, solve business problems, make financial decisions, manage data, conduct business research and manage schedules. Continued emphasis on proper keyboarding technique, accuracy and speed building. Prerequisites: ADM-230

ADN Associate Degree Nursing

ADN-145 Role Transition

Lecture 1 Lab 0 Credit 1

This course allows associate degree nursing students to explore the role expectation of the registered nurse and facilitate the transition from practical nursing to registered nursing. An emphasis is placed on health education and advanced application of the nursing process. Prerequisite: PNN (Level I) Curriculum.”

ADN-221 Pharmacology II

Lecture 2 Lab 0 Credit 2

This course focuses on concepts of pharmacology with special emphasis on the role of the nurse in developing a comprehensive approach to the clinical application of drug therapy through the use of the nursing process. Understanding how drugs work and their relationship to expected outcomes and possible adverse reactions is explored. Recognition of safe dosage ranges, potential interactions, patient factors that affect drug actions, and safe administration techniques are included. The education of clients about their drug therapies is a crucial component. Prerequisite: PNN (Level I) Curriculum. Corequisite: ADN-145.

ADN-311 Rn Issues And Trends

Lecture 1 Lab 0 Credit 1

This course assists the associate degree nursing student to begin the transition to an autonomous nursing practice. Career development, opportunities, and challenges of the registered nurse are explored in relation to changing health care trends. Principles of leadership and management are introduced. Prerequisite: ADN-641.

ADN-641 Nursing III

Lecture 8 Lab 19 Credit 14.5

This course integrates concepts previously presented in the curriculum. A systematic approach is utilized in planning and providing nursing care to individuals, families, and groups across the lifespan (pediatrics, adult and geriatrics). This course emphasizes selected acute and complex alterations in health and includes advanced content related to maternity care. An opportunity is provided for students to expand their theoretical knowledge, to broaden the application of critical thinking to the nursing process, and to refine their nursing skills in clinical settings. Prerequisites: ADN-145, ADN-221. Corequisite: PSY-111.

ADN-642 Nursing Iv

Lecture 8 Lab 18 Credit 14

This course integrates concepts and strands previously presented in the curriculum. A systematic approach continues to be utilized in planning and providing nursing care to individuals, families, and groups across the lifespan (pediatrics, adult and geriatrics). This course emphasizes selected acute and complex alterations in health and includes advanced content related to mental health. An opportunity is provided for students to expand their theoretical knowledge, to extensively apply critical thinking to the nursing process, and to continue to refine their nursing skills in clinical settings. Prerequisite: ADN-641.

AGA Agriculture-Agronomy

AGA-114 Principles Of Agronomy

Lecture 2 Lab 2 Credit 3

Detailed studies will be made of corn and soybean production, fertilization and harvesting methods. The processing of seed and grain will also be studied in this course, along with a close look at other cropping alternatives for the corn belt area. Laboratory work will be used to increase the understanding of key concepts.

AGA-154 Fundamentals Of Soil Science

Lecture 2 Lab 2 Credit 3

This course covers soil properties affected by their formation due to climate, vegetative cover, parent material, drainage and topography. Laboratory work will be used to increase the understanding of key concepts.

AGA-158 Soil Fertility

Lecture 3 Lab 0 Credit 3

This course explains the phenomena involved in making and keeping a soil in its most economical, productive state. Students learn why soils must be managed differently due to differences in origin and make up.

AGA-211 Grain And Forage Crops

Lecture 2 Lab 2 Credit 3

This course examines production management practices for corn, soybean, small grain, and forage crops common to Midwestern U.S. agriculture. Emphasis will be placed on growth and development, plant characteristics, management practices & problem solving.

AGA-376 Integrated Pest Management

Lecture 2 Lab 2 Credit 3

This course includes field observation of chemical control of weeds and insects and principles of safety and ecological ramifications of chemicals used in modern farming operations. The course also includes alternative pest control systems in modern farming practices and 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. Laboratory work will be used to increase the understanding of key concepts.

AGA-390 Introduction To Renewable Resources

Lecture 3 Lab 0 Credit 3

This course will provide an overview of soil, water, plants, and animals as renewable natural resources in an ecosystem context. This history and organization of resource

management and concepts of integrated resource management will be covered.

AGA-450 Issues In Sustainable Agriculture

Lecture 2 Lab 2 Credit 3

This course provides a clear perspective on the principles, history, and practices of sustainable agriculture in our local and global communities. Students will be introduced to the economic, environmental and social impacts of agriculture. Students will identify and apply the principles of sustainable agriculture as they relate to basic production. Lab work required.

AGB Agriculture-Farm Management

AGB-210 Agriculture Law

Lecture 2 Lab 0 Credit 2

This course is designed to make the student aware of the legalities of the farm business in regard to estate planning, leasing, contracts and legal liability.

AGB-235 Introduction To Agriculture Markets

Lecture 3 Lab 0 Credit 3

A course dealing with supply and demand for Agricultural market products, food marketing channels, farm vs. retail pricing and quality & safety. This course also covers issues in market structures, problems for farmers & Agribusiness firms. The role of Agriculture in the US economy and hedging with futures contracts and other risk management tools are also covered.

AGB-330 Farm Business Management

Lecture 3 Lab 0 Credit 3

A study of the use of the principles of farm management in developing a farm or farm business operation.

AGB-331 Entrepreneurship In Agriculture

Lecture 3 Lab 0 Credit 3

This course relates specifically to management of agriculture farms and businesses. Course content emphasizes budget planning, record keeping, record analysis, Ag finance/credit, and machinery and land management. Management exercises simulating farm activities and decisions are incorporated. Computers are used to aid in the completion of these management exercises.

AGB-336 Agricultural Selling

Lecture 3 Lab 0 Credit 3

Students will gain the necessary knowledge and the techniques of selling agriculture products

directly to producers. Included is knowledge of the buying process, communication skills and other factors that are beneficial in building relationships with customers.

AGB-437 Commodity Marketing

Lecture 3 Lab 0 Credit 3

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 marketing strategies.

AGB-466 Agriculture Finance

Lecture 3 Lab 0 Credit 3

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.

AGB-470 Farm Records, Accounts, Analysis

Lecture 3 Lab 0 Credit 3

Emphasis is placed on the importance of records as an essential management tool.

AGB-816 Student Internship I

Lecture 0 Lab 15 Credit 3.7

Individuals gain practical experience as employees in approved places of business. Prerequisite: Passage of Commercial Pesticide Applicators Exam.

AGB-826 Student Internship II

Lecture 0 Lab 15 Credit 3.7

Individuals gain practical experience as employees in approved places of business. Prerequisite: Passage of Commercial Pesticide Applicators Exam.

AGB-930 Agriculture Seminar

Lecture 1 Lab 0 Credit 1

This course is designed to enable the student to gain practical experience in the areas of farm equipment maintenance, equipment adjustment and operation, crop scouting for weeds, insects and diseases, and weed and insect management. It will be taught on an arranged basis at the SCC West Burlington campus as time and weather influence the operations necessary.

AGB-949 Special Topics

Lecture 0 Lab 2 Credit 1

This course is intended to provide the students an opportunity to explore an area of study in greater depth. Individual study projects will be determined by consultation between the student and the instructor. The course can be used for students studying abroad. Living experience,

study, and travel will determine credit. The course may be repeated for up to 6 credit hours.

AGC Agriculture-Comprehensive-Misc.

AGC-216 Career Seminar

Lecture 2 Lab 0 Credit 2

This course is designed to help students explore and discover the many opportunities that are available in the profession of agriculture and related industries both nationally and internationally.

AGC-420 Issues In Agriculture

Lecture 3 Lab 0 Credit 3

This course provides students the opportunity to collect, discuss, interpret, and defend current economic, environmental and social issues that affect the production of agricultural commodities.

AGC-936 Occupational Experience

Lecture Lab 12 Credit 3

An “on-the-job” experience at a local business. The business will provide a training sponsor in cooperation with an instructor/coordinator from the college staff. Hands-on experience in observing and demonstrating the knowledge and skills developed in the classroom. Prerequisites: AGC-420, AGB-437.

AGC-937 Occupational Experience

Lecture 3 Lab 0 Credit 3

An “on-the-job” experience at a local business. The business will provide a training sponsor in cooperation with an instructor/coordinator from the college staff. Hands-on experience in observing and demonstrating the knowledge and skills developed in the classroom.

AGH Agriculture-Horticulture

AGH-112 Introduction To Turf Grass Management

Lecture 3 Lab 3 Credit 4

This course covers the principles and practices of turf grass management for application to golf course, lawns, athletic fields, and playgrounds.

AGH-131 Greenhouse Management

Lecture 2 Lab 0 Credit 3

Manage greenhouse air, water, soil, and light for most efficient use of resources. Pest management, plant rotation and scheduling for flower sales are included.

AGH-221 Principles Of Horticulture

Lecture 2 Lab 2 Credit 3

This is an introductory course to students in various fields of horticulture and includes applications of scientific principles to commercial horticulture practices.

AGH-260 Fruits And Vegetables

Lecture 2 Lab 2 Credit 3

This course discusses the principles and practices of fruit and vegetable production with emphasis on home production and small commercial production. Insects, diseases of fruits and vegetables and storage methods will be covered.

AGM Agriculture-Mechanics

AGM-140 Farm Shop

Lecture 0 Lab 4 Credit 2

This course gives the student practical experience in designing and building equipment for the farm.

AGM-151 Farm Equipment Adjustment

Lecture 0 Lab 4 Credit 2

Students will utilize the operator’s manual to find information concerning the operation, lubrication and adjustment sections. Combine operations will be addressed as follows: perform initial calibration settings for wheat, corn and soybeans; determine type and amount of losses of grain and make adjustments to minimize those losses; and utilize the GPS unit to create GIS referenced yield data.

AGM-155 Farm Equipment Management

Lecture 2 Lab 0 Credit 2

This course deals with fitting farm equipment to the farming unit and the repair of farm equipment.

AGM-157 Machinery Management

Lecture 3 Lab 0 Credit 3

Student will utilize the operator’s manual to find information concerning operation, lubrication and adjustment sections. In addition, students will properly adjust and operate the following equipment: 1.) row crop cultivator; 2) square baler; 3) disc/harrow; 4) field cultivator. Course will also address safe handling procedures and the use of herbicides, calibration of the field sprayer for proper operation and adjusting the grain drill to plant soybeans and small seeds.

AGM-203 Agricultural Welding

Lecture 1 Lab 2 Credit 2

A shop course dealing with welding

AGN Agriculture-Natural Resources and Forestry

AGN-130 Soil And Water Conservation

Lecture 2 Lab 2 Credit 3

Emphasis will be on environmental practices as they relate to conservation management of our natural resources. Students will discuss soil erosion, water quality, and soil and water management. Lab work required.

AGN-244 Wildlife Management

Lecture 2 Lab 2 Credit 3

Students learn proper wildlife management through carefully planned and maintained reserves, preserves and refuges. Management techniques presented include for those game, non-game and aquatic animals.

AGP Agriculture-Precision Ag

AGP-329 Introduction To Gps

Lecture 3 Lab 0 Credit 3

This course is designed to provide a hands-on experience with the tools of precision agriculture: global positioning systems, geographic information systems and remote sensing and to incorporate the use of these tools into a management system for decision making.

AGP-340 Foundations Of Gis And Gps

Lecture 2 Lab 2 Credit 3

This course will enable the students to use and demonstrate the principles of GPS, GIS, remote sensing and precision application equipment. Soil sampling, farm mapping, combine yield monitoring, and developing Geographic Information System databases will be explored. Students will be exposed to computers and the use of precision agriculture software. Laboratory work will be used to increase the understanding of key concepts.

AGP-421 Applications Of Gis

Lecture 1 Lab 2 Credit 2

The course is will take students into advanced concepts in GIS and give hands on experience in the practical applications of a geographical information systems. Students will be enrolled in selected GIS short courses online and required to design a GIS project from scratch. They will setup the parameters for the project, collect the data, and format the final project. The project should be related to their career field.

AGP-456 Advanced Technology Applications

Lecture 3 Lab 0 Credit 3

This course is designed to teach the student advanced techniques in utilization of multi-spectral imagery in agricultural applications using several different types of software such as Erdas Imagery and SS Toolbox.

AGS Agriculture-Animal Science

AGS-113 Survey Of The Animal Industry

Lecture 2 Lab 2 Credit 3

Course studies ways domestic animals serve the basic needs of humans for food, shelter, protection, fuel and emotional well-being. Terminology, basic structures of the industries surrounding the production, care and marketing of domestic animals in the U.S. will also be studied.

AGS-216 Equine Science

Lecture 3 Lab 0 Credit 3

This course is an introduction to concepts, practices and decisions necessary when managing horses through stages of their lives.

AGS-225 Swine Science

Lecture 3 Lab 0 Credit 3

This course is designed around the life cycle concept of swine management. Each period will be discussed with respect to management of nutrition, disease control, housing and proper handling. Ethical production techniques will be stressed throughout the course. Laboratory work will be used to increase the understanding of key concepts.

AGS-226 Beef Cattle Science

Lecture 3 Lab 0 Credit 3

A course dealing with the retail beef industry, management decisions of the cow-calf and the yearling-stocker producers, major health problems and their prevention/treatment, remnant nutrition balance rations and forage resource management.

AGS-228 Beef Cattle Science

Lecture 5 Lab 0 Credit 5

A course dealing with the retail beef industry, management decisions of the cow-calf and the yearling-stocker producers, major health problems and their prevention/treatment, ruminant nutrition balance rations and forage resource management.

AGS-242 Animal Health

Lecture 3 Lab 0 Credit 3

This course provides information about the cause, nature, prevention, and treatment of common health problems of farm animals. Topics include identifying animal behavior and developing a herd health program.

AGS-270 Foods Of Animal Origin

Lecture 3 Lab 0 Credit 3

A general basic agri-food science course that deals with world food needs and available food supplies, types of food and nutritive value and use, and methods used and challenges involved in food production, transportation, preservation/processing, storage, distribution, marketing and consumption. The course covers both animal origin and non-animal origin food products.

AGS-319 Animal Nutrition

Lecture 3 Lab 0 Credit 3

A course in basic animal nutrition for swine and beef cattle. Feed utilization for maintenance/growth, reproduction and lactation is discussed. The formulation of rations on both a nutritional and economic basis as well as the substitution of ingredients will be covered.

AGS-330 Animal Reproduction

Lecture 4 Lab 0 Credit 4

This course will cover the principles of genetics and the physiology of male and female domesticated livestock.

AGS-331 Animal Reproduction

Lecture 3 Lab 0 Credit 3

A combined lecture and lab course, this course is presented with the agriculture student in mind. The first unit, Physiology, addresses cellular digestion, reproduction, genetics and ecology. The second unit, Applications, teaches the practical application of animal science. The third unit instructs students in the interpretation of performance data for judging and evaluating livestock.

AGT Agriculture-Technology

AGT-250 Food And Biosecurity Issues

Lecture 1 Lab 0 Credit 1

This course focuses on threats to food system biosecurity. Students will research and discuss contemporary issues regarding biosecurity, vulnerabilities of the food system from pre-harvest through post-processing, consumption and potential threats by class of agents.

ANI Animation

ANI-100 Story Development For Animation

Lecture 3 Lab 0 Credit 3

The purpose of this course is to introduce students to screenplay and story development. The student will be introduced to the heroic myth, its story structure and learn to relate it to modern screenplay construction through watching and analyzing screenplays. Students will be provided with the opportunity to develop their own story ideas and learn the stages of a typical story development pipeline through application and lecture. Corequisite: ENG-105.

ANI-101 Animation Software I

Lecture 2 Lab 2 Credit 3

This course will introduce students to basic computer use and to the basic processes used in animation. Students will use industry standard software to develop art assets and will be exposed to topics such as 3D modeling and sculpting, basic rigging and skinning, animation, materials and lighting and texture mapping.

ANI-102 Animation Software II

Lecture 2 Lab 2 Credit 3

Students will learn more advanced modeling & sculpting techniques to complete a low and hi-resolution character model. Lectures cover the use of anatomy as it pertains to modeling bipeds, as well as the technical needs for creating high quality deformable surfaces for animation. Students will also be introduced to basic lighting & compositing techniques. Prerequisites: ANI-101, ANI-116.

ANI-103 Animation Software III

Lecture 2 Lab 2 Credit 3

This course teaches the skills necessary to create complex bipedal character rigs. Students will discover forward kinematics, inverse kinematics, constraints, and more in this step-by-step introduction to character rigging. Students will also gain a deeper understanding of both technical and character animation including applying motion capture data to rigs. Prerequisite: ANI-102 Animation Software II

ANI-104 Animation Software IV

Lecture 2 Lab 2 Credit 3

This course will provide students with an understanding of the visual effects and compositing workflows in animation. Students will create realistic visual effects using various simulation tools and techniques such as texture effects, particles & dynamics, motion tracking & match moving. Students will gain

deeper knowledge of rendering to combine separate layers into a final image. Students will also learn advanced design principles as well as the social impact capable with motion graphics. Prerequisite: ANI-103.

ANI-109 Animation Principles & Techniques

Lecture 2 Lab 6 Credit 5

This course will provide students with an applied knowledge of the 12 principles of animation, namely; squash/stretch, anticipation, staging, straight ahead/pose to pose, follow through/overlapping action, slow in/out, arcs, secondary action, timing, exaggeration, solid drawing, & appeal as well as a variety of techniques to help prepare them for animating in any medium. This course will also cover a history of animation. Prerequisites: ANI-101, ANI-116, ART-133.

ANI-116 Exploring Human Movement

Lecture 2 Lab 2 Credit 3

This course explores drawing fully realized characters and provides students with a simplified understanding of human anatomy. Students will learn how to analyze figures to gain an understanding of strong body and weight mechanics as well as a good posing for animation. The groundwork for figure drawing will be established through a series of gesture and character studies with an emphasis being placed on building form through basic shapes, silhouette, proportion and expression.

ANI-136 Stop Motion/Video Production

Lecture 2 Lab 2 Credit 3

Students will be introduced to video equipment operation, techniques in video & stop motion production. Students will learn how to shoot and edit video. Students will also set lights & cameras for stop motion. Students will apply animation principles to arrive at their final product.

ANI-166 Capstone And Demo Reel For Animation

Lecture 2 Lab 2 Credit 3

Following successful completion of animation core coursework, this course will prepare students for life after graduation by providing insight into the animation industry. Students will promote their ability to enter the industry workforce by editing together a demo reel as well as creating an electronic portfolio full of their best work. Students will discover how to best present their work as well as key mistakes to avoid when entering the animation industry. This course is also designed to help students develop the materials and skills

necessary to obtain and maintain employment. Prerequisites: Successful completion of 50 hours of animation core course work.

ANI-210 Intermediate Animation

Lecture 2 Lab 6 Credit 5

Students will gain skills in the art of character animation as well as production workflows and techniques by practicing the application of the 12 principles of animation. Students will build a solid foundation of timing through comprehension of the subtleties of animation, while focusing on strong body and weight mechanics as well as good posing with strong silhouettes. This course will be divided into demos, exercises, lectures, and in-class critiques. Prerequisites: ANI-102 and ANI-109.

ANI-211 Advanced Animation

Lecture 2 Lab 6 Credit 5

This course covers the processes and techniques used to create believable and appealing body mechanics as well as an exploration of topics such as facial animation and lip-sync techniques in animation. Quadruped body mechanics will also be analyzed to create physically accurate motion for creatures. This course will be divided into demos, exercises, lectures and in-class critique to help students develop a better understanding of the subtleties of good animation, working towards producing demo reel-quality scenes. Prerequisites: ANI-210 Intermediate Animation.

ANI-932 Animation Internship

Lecture 0 Lab 15 Credit 3.7

This course is designed to provide the student with a practical experience in computer animation prior to completion of the Associate of Applied Science degree. The internship is supervised by the program coordinator & should be taken during the student's summer semester. Prerequisite: 48 hours completed towards the Computer Animation Program.

ANI-941 Animation Studio Practicum

Lecture 2 Lab 2 Credit 3

This course is designed to provide students with a practical experience in computer animation prior to completion of the Associate of Applied Science degree. This course is intended for non-interning students. Prerequisite: 48 hours completed towards the Computer Animation Program.

ANI-952 Topics-Animation

Lecture 1 Lab 2 Credit 2

The purpose of this course is to improve the marketability of students by affording them the opportunity to learn software programs specific to the companies where

they are applying to work. Students will use previously gained software knowledge to make class presentations demonstrating the basics of newly attained industry standard software. Prerequisite: ANI-102.

ARC Architectural

ARC-113 Architectural Drafting I

Lecture 2 Lab 4 Credit 4

A course designed to provide a knowledge of residential house construction and house plans. The students are required to draw architectural plans that include foundations, floor plans, electrical plans, elevations, details and perspectives. Prerequisites: CAD-101 or permission of instructor.

ARC-129 Residential/Light Commercial Drafting

Lecture 2 Lab 4 Credit 4

Designing and drawing a complete set of plans, including specifications, calculations, and rendering for multi-family or similar two story buildings. Emphasis will also be placed on designing an energy-efficient structure. Prerequisite: ARC-113 or permission of instructor."

ART Art

ART-101 Art Appreciation

Lecture 3 Lab 0 Credit 3

A study of aesthetics as related to human expression, especially within the visual arts of painting, sculpture and architecture. This is a humanities-oriented course where art principles are examined as they relate to the production and interpretation of Western art in both historical and cultural contexts covering the Renaissance through post-modern periods. Lectures are illustrated with slides and video tapes. Students will form personal opinions about art by looking at art and evaluating art with methods taught in class.

ART-120 2-D Design

Lecture 2 Lab 2 Credit 3

This beginning level course for either non-art or art majors allows the student to explore a variety of two dimensional media such as pencil, ink, pastel, watercolor, acrylics, etc., applied on paper and other types of surfaces. A variety of design styles and methods will be introduced using the various elements and principles of design.

ART-123 3-D Design

Lecture 2 Lab 2 Credit 3

This beginning level design course for non-art or art majors allows the student to explore a variety of three dimensional media making constructions such as relief designs, mobiles and sculpture using a variety of media such as wood, metal, wire, paint, etc., and other media of the student's choice. A variety of design styles and methods will be introduced.

ART-133 Drawing

Lecture 2 Lab 2 Credit 3

A beginning drawing class in a variety of media using an assortment of subjects. The student will explore theories and concepts of drawing.

ART-134 Drawing II

Lecture 2 Lab 2 Credit 3

Development and techniques of a personal drawing style, a continuation of Drawing I with more emphasis on the student's individualized curriculum. Prerequisite: ART-133.

ART-138 Figure Drawing

Lecture 2 Lab 2 Credit 3

This course introduces the students to figurative drawing. We will focus on structure of the human figure and compositional representation through observation. An emphasis will be placed on refining skills of observation and proportioning of the picture plane. A dialogue on formal aspects covered in Drawing I will continue. Personal expression, approach and conceptual language will be covered through assignments and from a figurative historical perspective. Prerequisite: ART-133 or equivalent.

ART-143 Painting

Lecture 2 Lab 2 Credit 3

A beginning painting course for non-art or art majors in a variety of media. A variety of subjects, theories and concepts will be considered.

ART-144 Painting II

Lecture 2 Lab 2 Credit 3

Development and techniques of a personal painting style; a continuation of Painting I with emphasis on the student's individualized curriculum. Prerequisite: ART-143.

ART-154 Mixed Media

Lecture 2 Lab 2 Credit 3

This beginning level course allows students to explore art projects that combine a variety of media. The course emphasizes experimentation with conceptual approaches to art. Examples of projects include mixed media on paper, on canvas, handmade art books, assemblage, and found object sculpture.

ART-157 Printmaking

Lecture 2 Lab 2 Credit 3

Introductory painting course with emphasis in basic printmaking techniques and processes. Printing proficiency in relief, stencil and/or intaglio prints will be pursued.

ART-173 Ceramics

Lecture 2 Lab 2 Credit 3

A beginning level course for either non-art or art majors exploring hand built pottery techniques and use of the potter's wheel.

ART-174 Ceramics II

Lecture 2 Lab 2 Credit 3

Advanced hand building and/or throwing techniques; larger scale or more in depth goals; projects may be more sculptural or one of a kind. Prerequisite: ART-173.

ART-184 Photography

Lecture 2 Lab 2 Credit 3

This course introduces basic camera operations and equipment, processing, and photographic print production for both the traditional and digital cameras. Topics include contrast, depth-of-field, subject composition, density control, film selection, proper exposure, and aesthetics. Digital image scanning, current tools, technologies and software will be covered. Students will need to provide a non-automatic 35MM camera and photographic materials.

ART-186 Digital Photography

Lecture 3 Lab Credit 3

Introduces students to the use, management and manipulation of photographs as a digital medium. Students will study Photoshop as a photographic editing tool and utilize critical analysis relating to ideas of photo editing and manipulation. Content will include the technical concepts of digital image editing and manipulation in the context of historical and contemporary theories of photography as an art form.

ART-203 Art History I

Lecture 3 Lab 0 Credit 3

A survey of art history from prehistory to the Renaissance. Both period style and personal styles will be compared to the lifestyles of the period. Emphasis will be on artists and artforms of Western cultures. Class work will consist of discussion of art using slides, prints and field trips.

ART-204 Art History II

Lecture 3 Lab 0 Credit 3

Continuation of ART-203 from Renaissance to post-modern.

ART-208 Introduction To Native American Art History

Lecture 3 Lab 0 Credit 3

This course would be a general introduction and overview of Native American Art History. It will cover the establishment and development of the visual art from earliest tribes to current tribes. It should also promote awareness of the American Indian in cross-cultural and cross-disciplinary perspectives by studying the arts. The course will be taught by lecture and presentation of slides. Field trips to surrounding sites to view artifacts will be conducted when possible.

ART-922 Field Studies

Lecture 3 Lab 0 Credit 3

Field tours to various nations and regions to study their art and art history. Many famous and culturally important original works will be examined. Specific written credit and participation requirements are established in advance of the field study and according to the number of credit hours enrolled. Each hour of credit requires a minimum of 54 hours of supervised travel and living expenses. May be repeated for up to 9 credit hours.

ART-928 Independent Study

Lecture 0 Lab 6 Credit 3

This course is intended to provide the students an opportunity to select a medium or concept and to explore it in greater depth than is possible in other art courses. Individual study projects will be determined by consultation between the student and the instructor. A minimum of 32 hours of laboratory effort is required for each semester hour of credit. Prerequisites: Any three of the following: ART-120, ART-123, ART-133, ART-143, ART-134, ART-144, ART-153, ART-173, ART-174 and permission of instructor. May be repeated for up to Nine (9) semester hours of credit.

AUT Automotive Technology

AUT-106 Intro To Automotive Technology

Lecture 1 Lab 2 Credit 2

This course will serve as an introduction to the complete automotive field, including safety, ASE certification, employment potential, customer service, employer/employee relations and the parts and service industry.

AUT-126 Fundamentals Of Automotive Servicing

Lecture 1 Lab 2 Credit 2

This course will familiarize students with basic scheduled maintenance. Proper usage of hand and power tools will be covered, as well as precision measuring systems and equipment. Prerequisite: A grade of C- or above in AUT-106.

AUT-166 Automotive Engine Repair

Lecture 3 Lab 6 Credit 6

This course will introduce the internal combustion engine and the variety of designs in popular usage today. It also offers a general introduction to engine diagnosis and testing. The engine will be explored piece by piece, and the description and function of each part explained.

AUT-190 Hybrid Fundamentals

Lecture 1 Lab 2 Credit 2

This course will familiarize students with general hybrid history and benefits, basic safety precautions, specific maintenance procedures, location and description of hybrid components for hybrid vehicles. Prerequisite: SCI-115

AUT-207 Automatic Transmissions/ Transaxles

Lecture 2 Lab 8 Credit 6

This course discusses automatic transmission and transaxle theory, components, operation and service.

AUT-244 Manual Drivetrains I

Lecture 1 Lab 4 Credit 3

This course will introduce the student to the concepts of front- and rear-wheel drive, four-wheel and all-wheel drive vehicles. Clutches, CV joints, and universal joints will also be covered.

AUT-246 Manual Drivetrains II

Lecture 1 Lab 4 Credit 3

This course will provide the student with an understanding of differentials, as well as the major parts of a manual transmission. Inspection, maintenance, lubrication, disassembly and reassembly will be emphasized. Prerequisite: AUT-244.

AUT-405 Automotive Suspension & Steering

Lecture 2 Lab 6 Credit 5

This course will look closely at automotive suspension systems, manual, power and four-wheel steering, and proper vehicle wheel alignment.

AUT-505 Automotive Brake Systems

Lecture 2 Lab 6 Credit 5

This course will explain and demonstrate the principles of friction and the components and operation of hydraulic brakes, including power and anti-lock brakes. Prerequisite: C- or above in AUT-126.

AUT-610 Automotive Electrical I

Lecture 2 Lab 4 Credit 4

This course will introduce to the student the theory and operation of basic electrical and electronic principles as a science. How the basics are applied to automotive electrical circuits and the proper procedures to diagnose and repair are covered. Lab sessions are spent turning theory into "hands-on" practice with meters and basic circuits.

AUT-625 Automotive Electrical II

Lecture 4 Lab 8 Credit 8

This course will build on the electrical and electronic basics learned in AUT-610, Automotive Electrical I. The semi-conductor will be explained and the application used in the automobile will be explored. The students will learn digital logic and computer functions and operations, which make today's automobiles run. Prerequisite: AUT-610.

AUT-700 Automotive Heating & Air Conditioning

Lecture 1 Lab 3 Credit 2.5

This course will cover heating, venting, and air conditioning theory, components and operation. Alternative refrigerants, retrofitting, troubleshooting and service procedures will also be covered.

AUT-800 Engine Performance

Lecture 4 Lab 8 Credit 8

This course will study the fuel and ignition delivery systems that make the internal combustion engine perform. The course covers early carburetion through fuel injection and point type ignition to distributorless ignition systems. The students will learn the diagnosis and repair techniques needed to repair the computer-controlled automobiles of today.

AUT-911 Cooperative/Internship

Lecture 0 Lab 16 Credit 4

Supervised work experience with an approved auto technology employer. Individual student eligibility will be determined by the instructor. Placement will depend on the student's skill level and the availability of appropriate training sites.

BCA Business Computer Applications

BCA-157 Intermediate Spreadsheets

Lecture 2 Lab 2 Credit 3

This advanced course in electronic spreadsheets emphasizes the use of advanced features of a leading electronic spreadsheet software package in a Microsoft Windows environment. Topics to be covered include spreadsheet editing, working with multiple worksheets, creating a Web page from a spreadsheet, developing spreadsheet applications, creating and using macros, using data tables and scenario management, importing data, and enhancing a spreadsheet with Visual Basic for Applications. Prerequisite: Grade of "C-" or higher in BCA-216, CSC-110 or CSC-140.

BIO Biology

BIO-105 Introductory Biology

Lecture 3 Lab 2 Credit 4

Introductory Biology is a lecture and lab course designed for non-science majors or as a refresher course of those wishing to take higher-level biology courses. Topics include chemistry of life, molecular and cellular biology, genetics, evolution, plant, animal, and fungi classification, and ecology.

BIO-112 General Biology I

Lecture 3 Lab 2 Credit 4

First semester of Biology for majors. Intensive cellular and molecular approach to the study of biological principles with emphasis on biomolecules, cellular biology, genetics, and evolution. Prerequisite: CHM-165.

BIO-113 General Biology II

Lecture 3 Lab 2 Credit 4

Second semester of biology for majors. Topics covered include: taxonomy and a survey of invertebrate and vertebrate organisms, fungi and plants. Prerequisite: BIO-112 with a minimum grade of C and CHM-165 with a minimum grade of C.

BIO-151 Nutrition

Lecture 3 Lab 0 Credit 3

This course explores nutrition as it relates to health, disease and stages of human development and life cycle. Emphasis is on essential nutrients, what they are and how they are used by the body. Food safety and food technology will be covered.

BIO-163 Essentials Of Anatomy & Physiology

Lecture 3 Lab 2 Credit 4

This introductory course is designed for the student needing a one-semester combined anatomy and physiology course with laboratory. All systems will be covered with greater emphasis on the cardiovascular, respiratory, immune and urinary systems. This course also provides background for the more advanced course, BIO-177, Human Anatomy.

BIO-168 Human Anatomy & Physiology I

Lecture 3 Lab 2 Credit 4

The first of a two-semester sequence providing a comprehensive study of the anatomy and physiology of the human body for college transfer and/or allied health prerequisites. Topics include body organization; homeostasis; cytology; histology; and the integumentary, skeletal, muscular, nervous systems, and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory component includes anatomical studies using microscopy and dissection of selected organisms as well as the study of physiological concepts via experimentation. It is highly recommended that a student complete this series (BIO-168 and BIO-173) at SCC in order to maintain transferability to four-year institutions.

BIO-173 Human Anatomy & Physiology II

Lecture 3 Lab 2 Credit 4

Second of a two-semester sequence continuing the comprehensive study of the anatomy and physiology of the human body for college transfer and/or allied health prerequisites. Includes the study of the endocrine, cardiovascular, lymphatic/immune, respiratory, digestive, urinary, and reproductive systems. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. Laboratory component includes anatomical studies using microscopy and dissection of selected organisms as well as the study of physiological concepts via experimentation. Prerequisite: BIO-168 with a minimum grade of C.

BIO-186 Microbiology

Lecture 3 Lab 2 Credit 4

A study of microbial populations and their relationships to the human in health and diseases. Prerequisites: A grade of C or better in BIO-252 or CHM-65 and BIO-112

BIO-252 Biomolecular Processes

Lecture 2 Lab 2 Credit 3

This class is designed primarily for first-year students in various health-related programs. Emphasis is placed on practical aspects of inorganic chemistry, organic chemistry and biochemistry as applied to the human body.

BIO-277 Evolution

Lecture 3 Lab 0 Credit 3

The course is an introduction to evolution by natural selection. Topics include the origins of the Universe, Earth and life as well as Darwin and natural selection. Topics also include Mendel and genetics/DNA. The evidence for evolution is presented, as is an overview of the controversy over evolution in the United States.

BIO-912 Current Topics

Lecture 3 Lab 6 Credit 3

This topical approach to the foundational concepts of biology examines theories and issues in biology as they relate to varying special topics selected by the instructor. Biological concepts and theories that may be covered in the course include, but are not limited to, the scientific method, biological molecules, cell biology, evolution, classification, genetics, ecology and environmental issues. Due to the nature of the course, the current issues will vary. Upon completing the course, the student will have a basic understanding of the issues raised (i.e. basic information about the biology involved) and an ability to critically analyze and discuss the issues. The student will also gain experience in utilizing library and/or Internet research resources. Depending on the credit taken, additional lab-like activities as appropriate to the topics studied will be integrated into the course.

BIO-922 Field Studies

Lecture 1-3 Lab 0-6 Credit 1-3

Field tours to various biomes, museums, and science research facilities to enhance the study of scientific concepts. Collections and displays of scientific importance, diverse ecological conditions, and/or laboratory facilities of interest will be examined. Specific written credit and participation requirements are established in advance of the field study and according to the number of credit hours enrolled

BUS Business

BUS-102 Introduction To Business

Lecture 3 Lab 0 Credit 3

An overview of contemporary business principles touching on all the major functional areas of business and trends that are shaping today's business environment. Understanding the fundamental pillars of the business environment -- globalization, technology, and ethics -- is a crucial component in this course.

BUS-121 Business Communications

Lecture 3 Lab 0 Credit 3

Designed to help the student develop effective communication techniques necessary for general business messages. The course emphasizes application of these techniques through the composition and keyboarding of letters, memos, reports and some oral presentations. Prerequisite: the ability to keyboard class assignments in mailable form.

BUS-140 Small Business Start-Up

Lecture 2 Lab 0 Credit 2

This course provides an introduction to the various aspects of starting a small business. There will be extensive coverage of how to create a business plan. The course will consist of various individual and group projects. Students should be able to enter the business world with the knowledge it takes to build a foundation for success in their own business.

BUS-150 E-Commerce

Lecture 3 Lab 0 Credit 3

This course will introduce the student to the basic elements of electronic commerce as a market where commercial activities are conducted. It will focus on business concepts and how to apply technology in order to be successful. Topics include market trends, globalizing a company, vendor solutions, storefronts, advertising, resource requirements, and operational issues of launching a commercial presence in today's global electronic marketplace.

BUS-180 Business Ethics

Lecture 3 Lab 0 Credit 3

This course introduces philosophical ethical theory and its application to business decisions. It considers theories of economic justice, social responsibility of corporations, regulation, conflict of interest and obligations, ethics of advertising, product quality and safety, environmental responsibility, hiring practices and rights of employers and employees.

BUS-185 Business Law I

Lecture 3 Lab 0 Credit 3

The legal environment of business. The study of contract requirements, personal property and bailments, as time permits.

BUS-186 Business Law II

Lecture 3 Lab 0 Credit 3

A continuation of BUS-185 in the area of: sales, principal agent relationships, commercial paper, creditors rights and secured transactions, real property, and bankruptcy. Prerequisite: BUS-185.

BUS-203 Professional Development

Lecture 2 Lab 0 Credit 2

This course is designed to build student skills in setting goals, conversation, meetings, parliamentary procedure, business meals and travel, customer service, presentations, professional image, and writing cover letters and resumes. The course also requires attendance at leadership, civic and cultural events.

**BUS-290 Employment Search/
Workplace Success**

Lecture 1 Lab 0 Credit 1

A discussion of field experience problems and study of new occupational information will be presented. An internship paper covering the experience will be submitted. Corequisite: BUS-932.

BUS-932 Business Internship

Lecture 0 Lab 14 Credit 4

The Administrative Assistant degree options offer, at certain stages of their curriculum, cooperative programs in which students may gain practical business experience. When the student has reached a predetermined level of proficiency, each student is placed at a training station for a predetermined number of contact hours where practical experience can supplement the classroom skill building. Placement will depend on student's skill level and the availability of appropriate training firms. Students enrolled in the Administrative Assistant Program must have completed ADM-162 and ADM-119 before enrolling in BUS-932 and BUS-290. Corequisite: BUS-290.

BUS-936 Business Capstone

Lecture 1 Lab 0 Credit 1

This course is designed to serve as a capstone class for Business majors. Topics covered in the course will include resumes, interview skills, and professionalism. In addition, each student will complete a case study in his/her particular area of interest including but not limited to accounting, management, marketing, and economics. In lieu of a case

study, a service learning or other project may be completed. A professional presentation of whichever activity is selected will be made. An end-of-program assessment will be taken as a part of this course. Prerequisite: Student must have completed at least 48 credit hours in the Accounting or Business Administration Degree or have program coordinator approval.

**CAD Computer Aided
Drafting**

CAD-101 Introduction To CAD

Lecture 1 Lab 4 Credit 3

An introduction to computer aided design and drafting. Actual hands-on experience in designing, drawing, and dimensioning using CAD micro-based CAD software. The course presents logical step-by-step instruction about the CAD commands, mode settings, drawing aids, shortcuts and other valuable characteristics of CAD. Finished copies of the students' work will be made on a printer or plotter.

CAD-114 AUTOCAD-ICCO

Lecture 1 Lab 2 Credit 2

Online only.

CAD-140 Parametric Solid Modeling

Lecture 1 Lab 4 Credit 3

This course covers the basics of creating parts, modeling utilities, creating engineering drawings, and creating assemblies using solid modeling software. Prerequisites: CAD-101 and CAD-277.

**CAD-230 Geometric Dimensioning/
Tolerancing**

Lecture 1 Lab 2 Credit 2

A course designed to acquaint students with the standards (ANSI Y14.5M) for Geometrical Dimensioning and Tolerancing, which is required for all government related drawings and manufactured products. Prerequisite: DRF-113, CAD-172, or permission of instructor.

CAD-248 Parametric CAD II

Lecture 1 Lab 4 Credit 3

A continuation of computer aided design (CAD) using SolidWorks software. The student will learn to create and print parametric solids as well as how to use SolidWorks to analyze objects. Prerequisite: CAD-180.

**CAD-277 3-D Dimensional (3-D)
Modeling I**

Lecture 1 Lab 4 Credit 3

This course teaches parametric solid model CAD basics. Three-dimensional parametric concepts with design intent and solid CAD models will be built and edited. This course

builds on previous basic drafting skills and focuses on using parametric solid modeling design software to develop technical drawings. Topics include patterns of features, editing, adding dimensions and creating simple assemblies. Prerequisite: CAD-101.

CFR Computer Forensics

**CFR-100 Introduction To Computer
Forensics**

Lecture 2 Lab 2 Credit 3

This course deals with the preservation, identification, extraction, documentation and interpretation of computer data. Special computer skills and tools will be introduced. Legal concerns and ethical conduct will be emphasized. Prerequisites: NET-142, NET-314 and NET-442.

CHM Chemistry

CHM-122 Intro To General Chemistry

Lecture 3 Lab 2 Credit 4

This introductory course is intended for non-science majors or for science majors who need a background in chemistry before taking College Chemistry I. Topics covered include properties of matter, measurements, atomic structure, chemical bonding and stoichiometry. Prerequisite: One year high school algebra or MAT-062.

CHM-165 General Chemistry I

Lecture 3 Lab 2 Credit 4

The first semester of a traditional two-semester sequence. General Chemistry I provides an in-depth and integrated study of chemical principles, including terminology, measurements, unit conversions, atoms, elements, molecules, compounds, moles, stoichiometry, gases and gas laws, energy, electron configurations, periodicity and chemical bonding. Prerequisite: 1 year high school chemistry or CHM-122 or BIO-252; high school algebra or equivalent.

CHM-175 General Chemistry II

Lecture 3 Lab 2 Credit 4

The second semester of the traditional two semester sequence. College Chemistry 11 covers basic principles of intermolecular forces, colligative properties, reaction kinetics, chemical equilibria, acids and bases, precipitation reactions, spontaneity and electrochemistry. Prerequisite: CHM-165."

CHM-263 Organic Chemistry I

Lecture 4 Lab 2 Credit 5

Fundamental principles of organic chemistry for premedical, pre-dental, pre-pharmacy, biochemistry, medical technology, forestry, and home economics students, as well as liberal arts students who have a special interest in the sciences. These general principles are illustrated by preparation and study of typical representatives of the aliphatic and aromatic series including all common functional groups. Prerequisite: CHM-175.

CHM-273 Organic Chemistry II

Lecture 4 Lab 2 Credit 5

Continuation of Organic Chemistry I, with advanced synthesis, instrumental analysis, and emphasis on biochemistry. Prerequisite: CHM-263.

CIS Computer Programming

CIS-125 Introduction To Programming Logic W/ Language

Lecture 2 Lab 2 Credit 3

Introduction to computer programming with structured program development and module designs emphasized. Write programs related to several areas, including input/output, numerical computation, iteration, recursion, data manipulation, and interactive procedures.

CIS-332 Database & Sql

Lecture 2 Lab 2 Credit 3

This course is an introduction to SQL as a database programming language to those already familiar with basic relational database concepts. Students will write executable SQL statements to create and maintain database objects.

CIS-504 Structural Systems Analysis

Lecture 2 Lab 2 Credit 3

Course will provide student knowledge in the complete process of systems analysis and design and the steps involved. Actual systems analysis and design lab practices will measure student's understanding. Concepts in Project Management will also be covered. Prerequisite: Fifteen hours of IT classes completed toward degree."

CIS-810 Emerging Technologies Seminar

Lecture 1 Lab 0 Credit 1

This course will provide the student with the skills to research, evaluate and make recommendations about new products and emerging technologies. Students will explore and research changing technologies and will make professional presentations

of their findings. Prerequisite: Fifty hours completed toward Information Technology or Graphic Communications degree.

CIS-952 Topics

Lecture 3 Lab 4 Credit 5

This course will enable students to explore various programming technologies and determine how they may be integrated to form practical solutions in today's marketplace. Topics may vary from semester to semester, depending on current market trends.

COM Communication

COM-102 Communication Skills

Lecture 3 Lab 0 Credit 3

This course is structured to develop the fundamentals of acceptable communication and technical expression relevant to the students' career requirements: reading, writing, listening, and speaking. Prerequisites: Mandatory COMPASS or ACT or AccuPlacer test score and mandatory eWrite or WritePlacer score (per SCC Writing Scores & Mandatory Course Placement Chart), or a C- or above in ENG-061, College Preparatory Writing II. No Waivers.

CON Construction

CON-108 Construction Safety

Lecture 1 Lab 0 Credit 1

The Construction Safety course will provide students with requirements and expectations required to work in the numerous facets of the construction industry. The course will introduce the national OSHA safety standards for General construction and upon their completion of this course will receive the OSHA 10 hour General Construction certification.

CON-113 Construction Printreading

Lecture 1 Lab 2 Credit 2

Stresses principles of interpreting trade blueprints and reading of specifications basic to all aspects of the trades. Deals with types of line, development and arrangement of views, dimensioning practices, and invisible edges. Practical problems from prints suited to the particular trade will be incorporated.

CON-128 Construction Management Estimating

Lecture 2 Lab 2 Credit 3

Interpretation of construction drawings and specifications. Introduction to estimating quantities, cost of materials, and labor costs. Work methods, job planning, project scheduling and control,

field administration and management procedures of contracting will be covered.

CON-147 Carpentry I

Lecture 3 Lab 6 Credit 6

A course designed to enable students to develop basic skills and knowledge in carpentry. Included in this course is the study of construction techniques with emphasis on basic safety, basic math, introduction to hand and power tools, basic rigging, fasteners, wood building materials, floor and wall systems, site preparation, concrete and reinforcement materials, concrete handling, and forming foundations and flatwork.

CON-148 Carpentry II

Lecture 3 Lab 6 Credit 6

A course designed to further enable students to develop carpentry skills with emphasis on special floor, wall and roof systems, reading plans and elevations, field engineering principles, forming and water and damp proofing. Prerequisite: CON-147.

CON-149 Carpentry III

Lecture 3 Lab 6 Credit 6

A continuation of carpentry skills with emphasis on stair construction, reinforcing concrete, patented forms, interior finish: ceiling systems, exterior wall finishes, roofing applications and installation of cornices, gutters and downspouts. Prerequisite: CON-148.

CON-252 Construction Electricity

Lecture 1 Lab 4 Credit 3

This course introduces the requirements for and installation of residential and light commercial electrical systems. Emphasis will be placed on local and national Electrical Codes. Hands-on experience will include such activities as basic wiring of the service entrance, panel box, circuits, switches, receptacles, telephone and TV jacks, door chimes, smoke detectors and other similar electrical devices. This course is specifically designed for those students choosing a Construction or Design curriculum.

CON-262 Commercial Carpentry II

Lecture 3 Lab 6 Credit 6

A course of further carpentry emphasis on finished stairs, introduction to supervision, laser instruments, supplements to ceiling systems, metal studs and drywall, interior finish: doors and windows, wall and floor specialties and cabinetry. Prerequisite: CON-149.

CON-270 Mechanical Systems

Lecture 1 Lab 4 Credit 3

A course designed to introduce students to the requirements of residential and light commercial plumbing, heating, and ventilation systems. Emphasis will be placed on local and national code requirements. Study will include the building requirements to receive each system, determining the size of system components and the theory of size calculations. Hands-on experience will include such activities as working with DWV piping, water supply piping, plumbing fixtures, heat and vent ducting, heating controls, and ventilation components.

CON-332 Construction Materials & Resources

Lecture 3 Lab 0 Credit 3

This course is designed as a comprehensive overview of the construction industry and materials used in the profession. It is a conceptual treatment of the construction-personnel production system. Also included is a study of the materials of construction, their properties, manufactures, characteristics and applications.

CON-340 Construction Surveying

Lecture 2 Lab 2 Credit 3

Leveling, topographic surveying, triangulation, horizontal and vertical angles, area, determination, and other basic construction applications. Includes the layout of buildings and road curvatures, care and use of instruments.

CON-345 Soils And Concrete

Lecture 3 Lab 0 Credit 3

This course is a study of the characteristics of soil and concrete. Such components as design, core samples, grain structure, compaction and strength test, mixes, treatments, reinforcement, "slump test", etc., will be covered as well as various application and installation methods.

CON-350 Construction Mgt Internship

Lecture 0 Lab 20 Credit 5

Provide student with the opportunity to integrate classroom learning and experiences in a construction industry setting. Internship agreement must be completed before students may enroll. Prerequisite: At least two construction courses must be completed with a minimum of a "C" grade in each course.

CPC Certified Professional Coder

CPC-121 Introduction To Medical Procedural Coding

Lecture 5 Lab 1 Credit 5.5

This course prepares students for a career in medical coding in the medical office. Introduction to current procedural terminology (CPT) manual, HCPCS and medical coding compliance and guidelines. Corequisites: CPC-126; CPC-129

CPC-126 Diagnostic Coding

Lecture 3 Lab 2 Credit 4

The course will prepare the student for application coding nuances and guidelines along with compliance as it is related to diagnostic coding. The student will be able to assign diagnostic codes reporting all applicable codes and sequence in accordance with the guidelines. Corequisites: CPC-120; CPC-129

CPC-129 Introduction To Medical Insurance & Billing

Lecture 1 Lab 2 Credit 2

This course is designed to assist students in understanding the complexities of current insurance and billing procedures in the medical office or clinic setting. The student will obtain a sound foundation of the nuances, guidelines and requirements involved. The student will be familiarized with claims submission for major medical insurance/reimbursement programs. Corequisites: CPC-121 & CPC-126.

CPC-131 Medical Insurance & Billing II

Lecture 2 Lab 2 Credit 3

This course will discuss all aspects of insurance billing for today's health care plans. The latest information on HIPAA and OIG regulations, diagnostic and procedural coding, and office and insurance collection strategies will be covered, ensuring preparation for real-world situations. Also covered will be the importance of the medical insurance specialist's role in filing clean claims, solving problems that do occur and collecting overdue payments. Prerequisites: HSC-114, MAP-145, MAP-431, CPC-120, CPC-125 and CPC-129. Corequisites: CPC-160 and CPC-150.

CPC-150 Medical Procedural Coding

Lecture 3 Lab 0 Credit 3

This course will discuss the background of CPT, HCPCS coding, modifier assignment, CPT guidelines and the assignment of codes, ICD-9 selection, medical necessity regulations, documentation guidelines, HIPAA law, and how to read, interpret, and audit a chart or

operative record. Prerequisites: HSC-114, MAP-145, MAP-431, CPC-120, MAP-105 and BIO-163. Corequisite: CPC-160.

CPC-160 Applications Of Procedural Coding

Lecture 0 Lab 4 Credit 2

This course allows the student to apply knowledge of CPT, modifier assignment, HCPCS, ICD-9 selection, with medical necessity. Prerequisites: HSC-114, MAP-145, MAP-431, CPC-120, MAP-105 and BIO-163. Corequisite: CPC-150.

CPC-810 Medical Coding & Billing Externship

Lecture 0 Lab 10 Credit 2.5

The student will be placed in a predetermined medical office, clinic or related facility, and work under the supervision of an office manager or coding/billing supervisor, and the program coordinator for a 160 hour minimum required practicum. Prerequisites: HSC-114, MAP-145, MAP-431, CPC-129, CPC-120, CPC-150, CPC-131, CPC-160, MAP-401 and MAP-532. Corequisite: CPC-945.

CPC-945 Medical Coding & Billing Seminar

Lecture 1 Lab 0 Credit 1

This course prepares students for job readiness skills needed in their chosen career of medical coding and billing. The student will also be prepared to take a mock certification examination. Prerequisites: HSC-114, MAP-145, MAP-431, CPC-129, CPC-120, CPC-125, CPC-150, CPC-131, CPC-160, MAP-401 and MAP-532. Corequisite: CPC-810.

CRJ Criminal Justice

CRJ-100 Introduction To Criminal Justice

Lecture 3 Lab 0 Credit 3

An introductory course in criminal justice designed to provide a philosophical and historical account of American criminal justice with emphasis on constitutional limitation.

CRJ-101 Ethics In Criminal Justice

Lecture 3 Lab 0 Credit 3

Focuses on philosophical and theoretical issues and analyzes research findings to determine their implications for future practice. The student will learn how to identify and confront difficult ethical decisions they are likely to face in their daily routines.

CRJ-109 Theories Of Interviewing

Lecture 3 Lab 0 Credit 3

The process of gathering information from others: the interviewee, the setting, the types of questions, nonverbal communication, deception and theories of communication. Corequisites: CRJ-141.

CRJ-111 Police And Society

Lecture 3 Lab 0 Credit 3

An examination of the role of the police and corrections in American society, and a discussion of prominent issues. The course will examine the various policing and correctional agencies will also be covered. Agency application of internal and ethical issues including use of force will be examined. Strategies and policies to improve policing and correctional work environment will also be discussed.

CRJ-120 Introduction To Corrections

Lecture 3 Lab 0 Credit 3

To trace the history of corrections and describe the various methods society has used to deal with people who violate its rules. The course will show the relationship of corrections and agencies to the overall criminal justice system.

CRJ-130 Criminal Law

Lecture 3 Lab 0 Credit 3

A study of the history, development and classification of substantive and procedural aspects of criminal law, defenses and criminal responsibility.

CRJ-132 Constitutional Law

Lecture 3 Lab 0 Credit 3

An analysis of the relationships between state legislations and the Bill of Rights. Includes the effect of the due process clause of the 14th Amendment on the application of the Bill of Rights to these states and Supreme Court decisions regarding the various state challenges. Prerequisite: CRJ-100.

CRJ-141 Criminal Investigation

Lecture 3 Lab 0 Credit 3

Fundamental methods of investigation, crime scene search, recording, collection and preservation of evidence, interview and interrogation, and case follow-up.

CRJ-222 Correctional Treatment Methods

Lecture 3 Lab 0 Credit 3

A criminal justice course designed to provide students the opportunity to examine and practice correctional treatment methods for diverse offender populations. Prerequisite: 48 Criminal Justice Program Credits.

CRJ-301 Introduction To Homeland Security

Lecture 3 Lab 0 Credit 3

The course is an examination of the role of government and, more specifically, first responders play in the current threat to our nation from terrorism. The course will examine the role, authority, and history of the government when faced with these threats. The structure, style, and current practices will be covered along with an attempt to discover best practices and cost effective solutions.

CRJ-932 Internship

Lecture 0 Lab 12 Credit 3

A practical work experience under professional supervision in a criminal justice agency. Prerequisite: Completion of Criminal Justice core or permission of instructor.

CRR Collision Repair/ Refinish

CRR-120 MIG (GMAW) Welding

Lecture 1 Lab 4 Credit 3

This course will serve as an introduction to metal inert gas welding or gas metal arc welding in collision repair. Students will learn how to identify and perform proper welding techniques to repair modern high strength steel cars/trucks and motorcycles.

CRR-201 Plastic Repair

Lecture 1 Lab 2 Credit 2

This course will serve as an introduction to identification and repair of the most commonly used plastics on modern cars and motorcycles as used in the automotive and wind power industry. Students will learn plastic welding and bonding techniques.

CRR-300 Preparation

Lecture 1 Lab 2 Credit 2

This course is an introductory course designed to help students identify safety hazards in the work area, safe vehicle lifting techniques and how to identify and handle hazardous materials. Students will learn how to inspect, remove and store trim, glass, metal and molding components; protect adjacent panels during repairs; remove corrosion materials and other protective coatings; review damage reports and analyze damage to determine proper method of overall repair; develop repair plan; use appropriate cleaners to remove contaminants from surfaces to be repaired; apply environmental practices associated with repair of cars/trucks and motorcycles. Prerequisite: Valid driver's license.

CRR-340 Metal Straightening

Lecture 1 Lab 4 Credit 3

This course will serve as an introduction to metal straightening and fabrication. Students will learn to manipulate and operate special equipment specifically designed to return metals back to their original shapes, contours, and fabricate panels. Students will learn to heat shrink and cold shrink metals to obtain original contours within industry standards and will learn to mix, apply and shape polyester fillers to OE appearances.

CRR-400 Panel Replacement And Adjustment

Lecture 2 Lab 3 Credit 3.5

This course will serve as an introduction to replacement and adjustment of non-structural parts. Students will learn to determine extent of damage; remove bolted, bonded and welded parts; repair aluminum; align hoods, doors, deck lids and fenders; straighten and rough out contours to their original shapes; weld torn sheet metal; restore corrosion protection; replace door skins; repair wind, water and dust leaks.

CRR-410 Full Or Partial Body Panel Replacement

Lecture 1 Lab 5 Credit 3.5

This course will serve as an introduction to the replacement of major structural and cosmetic weld on body panels on modern automobiles. Students will learn I-CAR based body panel and structural component sectioning techniques using metal inert gas welding and bonding materials.

CRR-454 Glass Replacement

Lecture 1 Lab 2 Credit 2

This course will serve as an introduction to replacement of broken tempered and laminated safety glass. Students will learn different types of installation techniques and how to identify and use proper adhesives for glass installation.

CRR-500 Damage Analysis

Lecture 1 Lab 2 Credit 2

This course will serve as an introduction to the evaluation of collision damage. Students will learn to identify primary and secondary damage and prepare a successful repair plan.

CRR-525 Straightening Structural Parts

Lecture 2 Lab 7 Credit 5.5

This course will serve as an introduction to the repair and realignment of modern Uni-body and Body over frame-constructed vehicles. Students will learn to apply corrective forces to reverse collision damage accurately and efficiently with all

forms of measuring equipment to restore vehicle to pre-accident condition.

CRR-575 Advanced Structural Repair

Lecture 2 Lab 8 Credit 6

This course will cover the proper sectioning techniques for structural components damaged in a collision. Techniques will focus on unibody and hydro-extruded frame components.

CRR-580 Advanced Frame Straightening

Lecture 2 Lab 8 Credit 6

This course will explain new techniques in full frame and unibody anchoring which are used to straighten to pre-collision specifications. The use of advanced measuring systems will be explained and utilized.

CRR-610 Steering And Suspension

Lecture 1 Lab 1 Credit 1.5

This course will serve as an introduction to wheel alignment and steering component and suspension repair. Students will learn suspension repair related to collision damage, how to measure, diagnose and realign steering components using modern state of the art equipment.

CRR-765 Computer Diagnosis For Auto Collision

Lecture 2 Lab 6 Credit 5

This course will study the safety related components that are damaged in a collision. The topics to be covered are: anti-lock brakes, seat belts, supplemental inflatable restraints and the computers that control them.

CRR-800 Introduction To Automotive Refinishing

Lecture 1 Lab 3 Credit 2.5

This course will serve as an introduction to the field of automotive refinishing and teach students to practice environmentally friendly application and disposal procedures. Students will learn to identify modern automotive refinishing products and reference related technical data for proper mixing and application.

CRR-812 Surface Preparation

Lecture 2 Lab 6 Credit 5

This course will serve as an introduction to applying modern automotive finishes and properly preparing substrates for refinishing. Students will learn to mix paint and identify and correct paint failures.

CRR-818 Introduction To Waterborne Finishes

Lecture 1 Lab 2 Credit 2

This course will serve as an introduction to today's new automotive paint systems, and the techniques and equipment used to apply them.

CRR-845 Color Tinting And Matching

Lecture 1 Lab 3 Credit 2.5

This course will serve as an introduction to the evaluation of color matching and blending paint in automotive refinishing on modern automobiles and motorcycles. Students will learn to adjust tint, hue and chroma to obtain a blendable color match.

CRR-875 Advanced Refinishing Methods

Lecture 2 Lab 8 Credit 6

This course will focus on today's high tech factory finishes and the techniques used to understand and repair finishes to factory quality. The course will also cover custom refinish techniques used for restoration and painted graphic design on cars/trucks and motorcycles.

CRR-932 Internship

Lecture 0 Lab 16 Credit 4

Supervised work experience with an approved auto collision repair employer. Individual student eligibility will be determined by the instructor. Placement will depend on the student's skill level and the availability of appropriate training sites. Prerequisite: Successfully complete ALL Auto Collision Repair Course work through third semester.

CSC Computer Science

CSC-110 Introduction To Computers

Lecture 3 Lab 0 Credit 3

This course provides an introduction to computer concepts. The student will use the Windows operating system, presentation software, electronic spreadsheet software, database management software and word processing software. Microcomputer hardware and software as well as the processing concepts associated with each will be discussed. The course will also include information on file management, the Internet, virus protection, and e-mail basics as applicable to the academic world as well as the business environment. Lab time outside class is required to complete projects.

CSC-140 Computer Fundamentals

Lecture 3 Lab 1 Credit 3.5

This course is an introduction to the microcomputer in both hardware and software. The terminology, internal

structure, board identification and associated peripheral equipment will be introduced. The Microsoft Office suite will be covered. The operating system will be covered along with structured programming in QBASIC.

DRA Drama

DRA-101 Introduction To Theatre

Lecture 3 Lab 0 Credit 3

Orientation to the theatre, including a study of dramatic structure through selected play readings and through research in the basic theories of theatre.

DRA-110 Introduction To Film

Lecture 3 Lab 0 Credit 3

This course introduces students to the various language systems of film, including film-making techniques, creators, genres, narratives, ideology, and film theory/criticism. Students will explore the cultural importance of cinema as art by analyzing selected movies and clips which demonstrate artistic excellence.

DRA-130 Acting I

Lecture 3 Lab 0 Credit 3

Theory and practice of acting for beginners. The course provides training to help the student in developing a technique for utilizing creative resources to express personality and character. Technical elements of the stage and production for the actor are studied, and workshop performances are included. The course is designed to impart the fundamentals of the art of acting and its relationship to life and living theatre through theory, practice, and performance. Prerequisite: SPC-112 or permission of instructor.

DRA-141 Theatre And Speech Participation I

Lecture 0 Lab 2 Credit 1

A concentrated laboratory course in specific areas of speech or theatre projects. Supervised participation involving the research, analysis and preparation of a specific speech or theatre project. Students will perform or demonstrate their skills at speech contests, community organization programs, or public performances sponsored by the College. The student must arrange for the area of participation prior to enrollment. May be repeated to a maximum of 4 semester hours.

DRA-142 Theatre And Speech Participation II

Lecture 0 Lab 4 Credit 2

A more extensive application of DRA-141. The student elects to participate in more than one area of speech or theatre programs, or assumes a major role in assisting with speech or theatre performance. The student must arrange for the areas of participation prior to enrollment. May be repeated to a maximum of 4 semester hours.

DRA-145 Oral Interpretation

Lecture 3 Lab 0 Credit 3

A study in developing skills in reading aloud to convey the intellectual, emotional, and aesthetic values of literature. Prerequisite: SPC-112 or permission of instructor.

DRA-165 Stagecraft

Lecture 2 Lab 2 Credit 3

This hands-on course will introduce students to scenery, costume, and property construction along with lighting and sound design. Included are stage development, theater safety and basic techniques involved in producing a live performance. Participation outside of class on a current production (either for SCC or a community production) is required.

DRF Drafting

DRF-113 Fundamentals Of Technical Drafting

Lecture 1 Lab 4 Credit 3

Fundamentals of drawing techniques conveyed using free hand sketching. Emphasis is placed on the ability to visualize in three dimensions, neatness, accuracy, legibility, speed and use of computer graphics in the solution of graphic problems.

DRF-121 Fundamentals Of Technical Drafting II

Lecture 1 Lab 4 Credit 3

Graphic communications emphasizing working drawings, detailing, dimensioning practices, tolerances, sectioning, auxiliaries, pictorials, fasteners, technical illustration and machine design. Prerequisites: DRF-113 and CAD-172.

DRF-805 Drafting Internship

Lecture 0 Lab 20 Credit 5

This course is designed to provide the student with a practical experience in the drafting and/or design field prior to the completion of their program. The practicum experience will be coordinated by the personnel of the drafting program. Prerequisite: Advanced standing and permission of instructor.

ECE Early Childhood Education

ECE-133 Child Health, Safety & Nutrition

Lecture 3 Lab 0 Credit 3

Health, Safety and Nutrition helps students learn how to create and maintain a safe and healthy environment for young children. Proper nutrition for children and practices that contribute to the prevention of illness are examined. The course reviews state laws and established policies for licensed child care centers related to health, nutrition, safety and child abuse and neglect. Students also learn American Red Cross First Aid and CPR for infants and children.

ECE-290 Early Childhood Program Administration

Lecture 3 Lab 0 Credit 3

Addresses the childcare needs of parents and children in conjunction with childcare as a business. Childcare as a business is influenced by such external components as needs of families, locations, and history while the internal components of planning space, purchasing equipment, program management, resources, time and personnel also impact the program.

ECE-932 Internship

Lecture 0 Lab 6 Credit 2

Early Childhood Education Internship provides students the opportunity to have a supervised work experience in an actual early childhood classroom setting. Cooperative sites could include area infant/toddler, preschool and K-1 programs in both public and private settings. Prerequisites: Certification in first aid, CPR and mandatory reports of child abuse and neglect.

ECN Economics

ECN-110 Intro To Economics

Lecture 3 Lab 0 Credit 3

An introductory economics course. Lessons will include both micro and macro economics. Competencies will include supply, demand, market structures, unemployment and international trade.

ECN-120 Principles Of Macro-Economics

Lecture 3 Lab 0 Credit 3

An introductory course in economics emphasizing macroeconomic theory and policy. The major topics will include economic systems, national income, national output, fiscal and monetary policy, unemployment, inflation,

and, as time permits, international trade.

ECN-130 Principles Of Micro-Economics

Lecture 3 Lab 0 Credit 3

An introductory course in economics emphasizing micro-economic theory and contemporary problems. The major topics will include a description of the United States economy; demand and supply, price, output, and wage determination; domestic problems; international economics and the world economy.

EDU Education

EDU-210 Foundations Of Education

Lecture 3 Lab 0 Credit 3

A survey course introducing students to the American education system. Topics of study include the following: characteristics of teachers and learners; curriculum; classroom management and assessment; foundations of education-history, philosophy, governance, and law; and schools' response to social and educational challenges. Students will complete a lesson plan and present it to the class. Corequisite: EDU-920.

EDU-235 Children'S Literature

Lecture 3 Lab 0 Credit 3

A survey of the history, critical issues, and characteristics of children's literature and an examination of both writing and illustration as the basis for evaluating and selecting children's literature for use in the pre-school and elementary classroom.

EDU-240 Educational Psychology

Lecture 3 Lab 0 Credit 3

This course examines the application of psychological principles, theories, and methodologies to issues of teaching and learning. Theory and research concerned with human learning, development, behavior, and motivation is reviewed with an emphasis on the cognitive, psychological, and social factors that relate to and influence learning in educational settings. Prerequisite: PSY-111.

EDU-247 Teaching Exceptional Learners

Lecture 3 Lab 1 Credit 3.5

A survey course introducing current and prospective teachers to the field of special education. Topics of study include the following: foundational knowledge, the new relationship between special and general education, legislation, characteristics of different types of exceptional learners, and research-based teaching strategies and accommodations.

EDU-920 Field Experience

Lecture 0 Lab 2 Credit 1

Field Experience provides the student an opportunity to observe a teacher in a local classroom and to work with students in that classroom under direct supervision of the cooperating teacher. The student will keep a reflective journal. Corequisite: EDU-210.

EGT Engineering Technology

EGT-116 Continuous Quality Management

Lecture 3 Lab 0 Credit 3

This introductory course will lead the student into the world of quality and the quality process. Students will analyze the performance of a production process, formulate process adjustments or improvements, and carry out the strategies for process adjustment and/or improvement.

EGT-142 Fluid Power 1 (Hydraulics)

Lecture 1 Lab 2 Credit 2

This course discusses the fundamentals of hydraulic technology. Students will learn hydraulic circuits, pumps, actuators, valves, fluid, safety, maintenance, and troubleshooting. Students will also learn how to operate, install, analyze performance and design hydraulic systems.

EGT-143 Fluid Power 2 (Pneumatics)

Lecture 1 Lab 2 Credit 2

This course discusses the fundamentals of pneumatic technology. Students will learn specific skills needed to understand the principles of pneumatics including circuits with compressed air power, air processing, valves, safety, maintenance, and troubleshooting. Students will learn industry skills including how to operate, install, analyze and design pneumatic systems.

EGT-147 Hydraulic Power Systems & Troubleshooting

Lecture 0.5 Lab 1 Credit 1

This course will cover the operation, diagnosis and maintenance of basic and complex hydraulic systems. Prerequisites: EGT-142.

EGT-400 Introduction To Engineering Design

Lecture 1 Lab 4 Credit 3

This course uses a design development process while enriching technical and engineering problem-solving skills; students create and analyze models using specialized computer software (AutoCAD Inventor).

EGT-420 Digital Electronics

Lecture 2 Lab 2 Credit 3

This course is an introduction to fundamental digital circuits and systems is presented by study of integrated circuit logic modules. Emphasis is placed on troubleshooting techniques and tools.

ELE Electrical Technology

ELE-116 Blueprint Reading

Lecture 1 Lab 0 Credit 1

This course discusses the specific data that is drawn on a blueprint and explains how to read and interpret the drawing format. Students will learn orthographic and isometric drawings to understand shapes, sizes, and dimensions. Students will study building terms and construction features of carpentry, masonry, electrical, mechanical and plumbing trades.

ELE-127 Troubleshooting

Lecture 0.5 Lab 1 Credit 1

This course introduces students to the fundamental sequence of steps that can be applied when attempting to locate and repair problems in electrical and mechanical equipment. Students will learn how to use proper testing equipment to assist in finding faulty components. Students will learn how to plan a course of action for troubleshooting and repairs of equipment.

ELE-130 Home And Farm Electricity

Lecture 1 Lab 2 Credit 2

This course introduces the requirements for residential and farm electrical systems. Emphasis will be placed on local and national Electrical Codes. Hands-on experience will include such activities as basic wiring of the service entrance, circuits, switches, receptacles, lighting, special appliance circuits, and motor circuits. This course is specifically designed for students not choosing a construction curriculum.

ELE-195 Motor Controls

Lecture 1 Lab 4 Credit 3

This course discusses Motor Controls, components, operation and service. Students will learn electric relay control of AC and DC electric motors found in industrial applications. Students will also learn industry-relevant skills including how to operate, install, design, and troubleshoot AC and DC motor control circuits.

ELE-310 Industrial Electricity

Lecture 1 Lab 2 Credit 2

This course discusses important properties of electricity and the common electrical elements found in industrial settings. Students will learn how to install and wire

electrical components. Students will also learn how to layout a project; estimate wiring quantities, lengths, and sizes between panels and properly size and install conduit.

ELT Electronics

ELT-116 Principles Of Electronics

Lecture 3 Lab 4 Credit 5

This course analyzes the physical phenomenon of electricity in direct and alternating current circuits. Circuit analysis shall be through the application of various laws and theorems, and in the laboratory, through the use of typical test equipment. Prerequisite: placement test.

ELT-119 Applied Human Biology For Biomed Technicians

Lecture 3 Lab 0 Credit 3

This course presents the human biology, anatomy, physiology, and medical terminology essential for biomedical equipment technicians and the devices involved in patient care. Focus is on the vocabulary necessary for effective medical communication skills in the hospital environment as part of the health care team.

ELT-132 Motor Drives

Lecture 0.5 Lab 1 Credit 1

This course discusses the fundamentals of motor drive operation and setup. Students will learn industrial AC electronic motor drives, which are used to provide accurate control of speed, position, and acceleration of industrial motors. Students will also learn industrial skills on how to operate, install, tune, and troubleshoot various industrial drives. Prerequisite: ELE-195.

ELT-176 Instrumentation

Lecture 1 Lab 4 Credit 3

This course introduces students to the basic principles and concepts of process control, calibration, replacement, repair adjustment, troubleshooting, and use of test equipment. Students will learn how to calibrate, adjust, install, operate, and connect process control systems. Students will also learn how to measure signals and connect devices in a wide variety of control configurations including: PID control on/off control, and manual control. Prerequisite: ELT-295.

ELT-232 Plc Applications

Lecture 2 Lab 4 Credit 4

This course provides a hands-on approach to develop fundamental knowledge of PLC (Programmable Logic Controller) principles by exposing the student to ladder logic circuits and their practical applications. Ancillary input and output devices used with PLC systems

are included as well as elementary electrical machines. While the laboratory utilizes Allen-Bradley PLC's, a generic design approach is stressed during the lectures. Design of practical working control circuits is included to enhance understanding. Also included are the various number systems, digital codes and program commands used in PLC's and integrated systems. Prerequisite: CSC-140 or equivalent.

ELT-250 Programmable Logic Controllers

Lecture 1 Lab 4 Credit 3

This course introduces students to PLC tasks such as programming, wiring, troubleshooting, communications, and advanced programming. Students will learn industrial relevant skills on how to operate, interface, program and troubleshoot PLC systems. Students will learn how to set up software drivers, log onto networks, upload and download projects, and search for documentation.

ELT-262 Adv. Plc & System Integration (Mechatronics)

Lecture 2 Lab 8 Credit 6

This course introduces advanced topics in programmable logic controllers using the Allen-Bradley ControlLogix and RSLogix 5000 programming software including programming input, output, bit, timer, counter, compare, move, and math instructions. Students will learn how to create and modify subroutines and configure devices. Students will learn industrial relevant skills on how to operate, program and troubleshoot PLC systems and learn system integration with, electrical, mechanical, pneumatic, and robotic devices."

ELT-295 Ac/Dc Fundamentals

Lecture 1 Lab 2 Credit 2

This course introduces students to the components used in most electronic circuits and how they are measured, tested and function. Students will learn the fundamentals of AC and DC electrical systems used for power and control in industrial applications. Students will learn how to operate, install, design and troubleshoot basic AC and DC electrical circuits.

ELT-329 Digital Electronics For Et

Lecture 3 Lab 2 Credit 4

An introduction to fundamental digital circuits and systems is presented by study of integrated circuit logic modules. Number systems, coding and elemental Boolean principles are also covered. Emphasis is placed on troubleshooting techniques and tools.

ELT-355 Electronic Circuits I

Lecture 3 Lab 4 Credit 5

Introduction to semiconductor circuit analysis. The operational characteristics and applications of diodes, bipolar and field-effect transistors, and linear integrated circuits will be examined. Troubleshooting methods and techniques will be discussed and applied in the laboratory. Prerequisite: ELT-116.

ELT-357 Electronic Circuits II

Lecture 3 Lab 4 Credit 5

An expansion on the material presented in Electronic Circuits I. This course will examine the op-amp further in its many linear and non-linear applications. Other related linear integrated circuits will be investigated and applied. Basic modulation and demodulation processes will be included. Prerequisite: ELT-355.

ELT-435 Telecommunications

Lecture 4 Lab 2 Credit 5

Examines electronic communications topics such as noise, frequency domain analysis, analog and digital modulation methods, transmitters, receivers, multiplexing, digital communications, telephony, transmission lines and wave guides, antennas, wave propagation, microwave and video. Prerequisite: ELT-355 or equivalent.

ELT-486 Electromechanical Technology

Lecture 2 Lab 2 Credit 3

Students will use their previous knowledge in electronics to understand and apply real world mechanical applications in the industrial setting. Concepts learned will include fixturing, gearing, motors, and linear motion. Prerequisite: ELT-355.

ELT-630 Microprocessor/Interfacing

Lecture 3 Lab 4 Credit 5

This course is an introduction to techniques and equipment used for a variety of data acquisition requirements. The use of computers, test equipment, sensors and software for data acquisition in an industrial environment will be the main focus. Prerequisites: ELT-355 and ELT-329.

ELT-800 Biomedical Electronic Systems

Lecture 3 Lab 2 Credit 4

This course examines the use of electronics in health sciences and related fields by bringing together the student's understanding of anatomy and physiology, chemistry and electronics to study the measurement of the body's electrical signals and other physiological measurements, to include cardiovascular,

pulmonary, temperature, flow and pressures. This will include a hands-on study of medical equipment used in the hospital and other medical environments to diagnose and treat patients. Issues associated with patient and technician safety will be discussed. This course will also explore applicable NFPA99, JCAHO, CLIA, FDA, and other regulatory agencies and their regulations governing medical equipment in the clinical environment. Prerequisites: ELT-119, ELT-357, ELT-630, BIO-252.

ELT-801 Medical Documentation & Compliance

Lecture 3 Lab 0 Credit 3

This course will teach the biomedical students to properly document their work when in the medical environment. This course will cover topics including HIPAA rights, NFPA99, AAMI, JC compliance, work order documentation, the use of SOP's and infection control. This course will also teach the students how to properly research these topics as regulations change frequently. Prerequisite: ELT-119.

ELT-932 Internship

Lecture 0 Lab 16 Credit 4

This internship is intended to be the clinical experience portion of the Biomedical Electronics Seminar. Students in this course will be assigned to a selected setting to apply principles and skills learned in previous course. Graded on a Credit (P)/ No Credit (Q) basis. Prerequisite: ELT-800.

EMS Emergency Medical Services

EMS-114 Emergency Medical Responder

Lecture 1 Lab 2 Credit 2

This course emphasizes the development of student skills in emergency medical care procedures. Curriculum includes life threatening emergencies, injuries to various body parts, techniques of moving patients, CPR BLS, Mandatory Reporting, and blood borne pathogens. Successful completion of course requirements allows students to write certification examination for emergency Medical Responder. Course meets preadmission requirements for all health occupations. Students must be 17 to enroll.

EMS-201 Emergency Medical Technician

Lecture 5 Lab 2 Credit 7

This course is designed to instruct a student to the level of emergency medical technician who serves as a vital link in the chain of the health care team. Southeastern Community College's training program follows the National Highway Traffic Safety Administration's Department of Transportation (DOT) EMT curriculum. This course includes all skills necessary for the individual to provide emergency medical care at a basic life support level with an ambulance service or other specialized service. Southeastern Community College is approved by the Iowa State Department of Public Health (Bureau of EMS). Upon successful completion of this course, the student will be eligible to take the National Registry's practical and written exam for EMT certification. Students must be 17 years old to enroll. Prerequisite: Current basic life support certification (health care providers module).

EMS-239 Advanced Emergency Medical Technician

Lecture 5 Lab 2 Credit 7

This course will provide the student with roles and responsibilities of the EMS provider; well-being including injury prevention and infectious disease; an overview of human systems; pharmacology; venous access; airway management; training for management of medical and trauma emergencies; special considerations of the obstetric; neonatal, pediatric, and geriatric patients; and focus on assessment-based management. This course will also provide the student the opportunity to apply past and current cognitive knowledge and psychomotor skills in a supervised clinical or field setting. Student must have current Iowa EMT certification. Prerequisites: Healthcare Provider CPR, Current EMT Certificate.

EMS-663 Paramedic I

Lecture 12 Lab 8 Credit 16

This course prepares the student in the knowledge and skills needed in the pre-hospital environment. National Standard Paramedic Curriculum topics covered include: Well-being of the EMT, Illness and Injury Prevention, Ethics, EMS System, Roles and Responsibilities, Medical Legal Issues, Pathophysiology, Therapeutic Communications, Life-span Development, Airway Management and Ventilation, Patient Assessment, Communications, Documentation, Medication Administration, Pharmacology and Cardiology. Lab skills addressed include patient assessment, development of airway management skills, IV

fluid management skills, communication skill development and cardiac monitoring skills. Prerequisite: Current Iowa EMT Certification.

EMS-664 Paramedic II

Lecture 10 Lab 6 Credit 15

This course prepares the student in the knowledge and skills needed in the pre-hospital environment. National Standard Paramedic Curriculum topics covered include: Medication Administration and Medical and Trauma Emergencies of various body systems. This course has a hospital clinical internship. This internship provides the opportunity to apply, in the clinical setting, the didactic knowledge and skills developed in the classroom and lab. It serves to assist the student to become an employable EMS provider. Clinical skills addressed include trauma management, patient assessment and evaluation, airway management skills, IV fluid management skills, communication skill development, and cardiac monitoring skills. Prerequisite: EMS-663.

EMS-665 Paramedic III

Lecture 3 Lab 2 Credit 7

This course prepares the student in the knowledge and skills needed in the pre-hospital environment. National Standard Paramedic Curriculum topics covered include: Review of previous course material, Pediatrics, Geriatric, Psychiatric Disorders, and Patients with Special Challenges. This course also includes hospital clinical internship. This internship provides the opportunity to apply, in the clinical setting, the didactic knowledge and skills developed in the classroom and lab. It serves to assist the student to become an employable EMS provider. Clinical skills addressed include pediatric assessment and management, gynecological management, geriatric management, trauma management, patient assessment, airway management skills, IV fluid management skills, communication skill development, and cardiac monitoring skills. Prerequisite: EMS-664.

ENG English

ENG-060 College Preparatory Writing I

Lecture 2 Lab 2 Credit 3

This comprehensive English course concentrates on sentence structure and provides practice in writing complete sentences, editing and basic paragraph planning. It is offered in the classroom and in the computer lab. Prerequisites: Mandatory COMPASS or ACT test score and mandatory eWrite score (per SCC Writing Scores & Mandatory Course Placement Chart). No waivers.

ENG-061 College Preparatory Writing II

Lecture 2 Lab 2 Credit 3

College Preparatory Writing II is a preparatory course for ENG-105, Composition I. Emphasis is on paragraph development in the rhetorical modes, basic grammar, and punctuation. Computer lab time is provided, as well as basic instruction in word processing. Prerequisites: Mandatory COMPASS, ACT or AccuPlacer test score and mandatory eWrite or WritePlacer score (per SCC Writing Scores & Mandatory Course Placement Chart), or a C- or above in ENG-060, College Preparatory Writing I. No waivers.

ENG-067 Composition I Lab

Lecture 0 Lab 2 Credit 1

A basic writing skills laboratory to assist selected students while they are enrolled in English Composition I. Graded on a Pass (P)/ No Pass (Q) basis. Prerequisites: Mandatory COMPASS, ACT or AccuPlacer test score and mandatory eWrite or WritePlacer score (per SCC Writing Scores & Mandatory Course Placement Chart), or a C- or above in ENG-061, College Preparatory Writing II. No waivers.

ENG-105 Composition I

Lecture 3 Lab 0 Credit 3

A study of the principles of writing. Emphasis on rhetoric, mechanics, and development of expository patterns: narration, description illustration, comparison/contrast, classification, process, and cause/effect. Required for AA and AS Degrees. Prerequisites: Mandatory COMPASS, ACT or AccuPlacer test score and mandatory eWrite or WritePlacer score (per SCC Writing Scores & Mandatory Course Placement Chart), or a C- or above in ENG-061, College Preparatory Writing II. No waivers.

ENG-106 Composition II

Lecture 3 Lab 0 Credit 3

A continuation of study of the principles of writing begun in ENG-105. Emphasis is placed on persuasive writing, critical analysis, and the MLA research paper. Time will also be spent exploring print and electronic research sources and learning effective research strategies. Required for AA and AS Degrees. Prerequisite: C- or above in ENG-105.

ENG-111 Technical Writing

Lecture 3 Lab 0 Credit 3

Studies the rhetorical techniques specifically oriented to industrial requirements. Applies expository patterns as incorporated within the report apparatus, including such specialized formats as process analysis, progress/ lab reports, feasibility study, and the proposal. Also includes correspondence and application of

basic library research skills. Course designed to satisfy specified career program requirements. Prerequisites: Mandatory COMPASS, ACT or AccuPlacer test score and mandatory eWrite or WritePlacer score (per SCC Writing Scores & Mandatory Course Placement Chart), or a C- or above in ENG-061, College Preparatory Writing II. No waivers.

ENG-131 Business English

Lecture 3 Lab 0 Credit 3

This course teaches the fundamentals of written communication with focus on the elements of effectively written business documents. The emphasis is on the development of writing skills through a) exercises in grammar, mechanics, usage, and spelling and b) application of these skills in a variety of written business documents. Prerequisites: Mandatory COMPASS, ACT or AccuPlacer test score and mandatory eWrite or WritePlacer score (per SCC Writing Scores & Mandatory Course Placement Chart), or a C- or above in ENG-061, College Preparatory Writing II. No waivers.

ENG-221 Creative Writing

Lecture 3 Lab 0 Credit 3

Instruction and practice in multiple genres of creative writing. Students study the art, craft, and discipline of creative writing by reading, discussing, and critiquing the work of prominent writers; by experimenting with various writing methods and techniques; and by reading, discussing, and critiquing student work. Instruction, practice, and workshops will address elements of creative writing such as content, structure, form, and style in particular and multiple genres. This course may be repeated for up to 6 credit hours. Prerequisite: C- or above in ENG-105, Composition I. No Waivers.

ENG-929 Individualized Projects

Lecture 1 Lab 0 Credit 1

Extensive writing based on the interest and experience of the student. May receive 1 - 3 credits, based upon consultation with instructor. May be repeated for up to 4 credit hours.

ENV Environmental Science

ENV-111 Environmental Science

Lecture 3 Lab 2 Credit 4

An interdisciplinary approach to the problems of the environment. An examination and evaluation will be made of man's impact on the environment. Specific topics that may be covered include, but are not limited to: population issues, atmospheric issues, water issues, energy issues, resource issues,

wildlife issues, and food issues. This course contains a lab component.

ENV-145 Conservation Biology

Lecture 4 Lab 3 Credit

This course examines the ecological principles used in the preservation of biological diversity. Some topics explored are population dynamics, conservation genetics, island biogeography, mathematical modeling of ecological systems, disturbance ecology, Geographic Information Systems (GIS), reserve theory and wildlife corridors. Laboratories will involve fieldwork, data analysis, computer work and research. Prereq: ENV-111. Prerequisites: ENV-111"

ESI Intensive English as a Second Language

ESI-010 Phonetics And Pronunciation

Lecture 3 Lab 0 Credit 3

The study of English segments and intonation for non-native speakers. Emphasizes the use of phonetic alphabet. Prerequisites: ESL-013, 015, 018, or Compass ESL Level II placement.

ESL Non-Intensive English as a Second Language

ESL-002 Cultural Orientation

Lecture 0 Lab 2 Credit 1

This course introduces new international students to American life, the educational system and the Burlington community. It covers such topics as culture shock, academic honesty, personal safety, driving in Iowa, etc. This course will be taken on a Pass/No Pass basis only.

ESL-013 ESL Listening/Speaking I

Lecture 4 Lab 0 Credit 4

Listening/Speaking course for non-native speakers of English. The course helps students develop basic speech competencies through integrated language skills. Students focus on language: pronunciation, word forms, word domains, idiomatic expressions, analogies using semantic context. It is recommended to take the course concurrently with ESL-015, Reading/Writing I and ESL-018, Grammar I.

ESL-015 ESL Reading/Writing I

Lecture 4 Lab 0 Credit 4

Reading/Writing course for non-native speakers of English. A beginning course designed to develop reading and writing skills. Students work on expanding vocabulary, focus on word forms, prefixes, suffixes and phrases. Writing topics include paragraphs, letters and brief summaries. It is recommended to take the

course concurrently with ESL-013, Listening/Speaking I and ESL-018, Grammar I.

ESL-018 ESL Grammar I

Lecture 3 Lab 0 Credit 3

Grammar course for non-native speakers of English. The course introduces students to the form, meaning, and usage of basic structures in English. It provides opportunities to practice through extensive and varied exercises leading to communicative activities. Concentration is on present and past tenses, copular be, nouns and pronouns. It is recommended to take the course concurrently with ESL-015, Reading/Writing I and ESL-013, Listening/Speaking I.

ESL-033 ESL Listening/Speaking II

Lecture 3 Lab 0 Credit 3

Listening/Speaking course for non-native speakers of English. This course further develops conversational skills in order to improve the ability to speak clearly and effectively. Authentic audio recordings, videotapes and listening to peers are used to develop listening skills. Daily work on pronunciation targeted at achieving an understandable accent. It is recommended to take the course concurrently with ESL-035, Reading/Writing II, and ESL-038, Grammar II. Prerequisite: ESL-013, Listening/Speaking; COMPASS ESL Level II.

ESL-035 ESL Reading/Writing II

Lecture 3 Lab 0 Credit 3

Reading/Writing course for non-native speakers of English. This course increases reading skills in comprehension, speed and fluency. It continues development of understanding and using English sentence patterns through written practice. It is recommended to take the course concurrently with ESL-033, Listening/Speaking II and ESL-038, Grammar II. Prerequisite: ESL-015, Reading/Writing I; COMPASS ESL Level II.

ESL-038 ESL Grammar II

Lecture 3 Lab 0 Credit 3

Grammar course for non-native speakers of English. The course introduces students to the form, meaning, and usage of the English structures. Communicative approach provides students with the immediate applications of the knowledge gained in the class. Work on new grammar tenses, modal verbs, adjectives and adverbs. It is recommended to take the course concurrently with ESL-035, Reading/Writing II and ESL-033, Listening/Speaking II. Prerequisites: ESL-018 Grammar I; COMPASS ESL Level II

ESL-053 ESL Reading/Writing III

Lecture 2 Lab 0 Credit 2

Reading/Writing course for non-native speakers of English. This course provides the students with intensive practice in reading strategies acquisition. Emphasis on understanding of the content while building language skills, predicting and understanding main ideas and details, identifying parts of speech. Critical thinking skills are practiced throughout the course. The students learn the process of prewriting, organizing, revising, and editing while reviewing and expanding the acquired vocabulary. It is recommended to take the course concurrently with ESL-055, Listening/Speaking III and ESL-058, Grammar III. Prerequisite: ESL-035; COMPASS ESL Level III.

ESL-055 ESL Listening/Speaking III

Lecture 2 Lab 0 Credit 2

Listening/Speaking course for non-native speakers of English. This course is designed to develop fluency in English and to improve the listening and conversational skills needed for careers and academic study. Speaking focuses on stress, rhythm, and intonation. Theme-based pronunciation practice reinforces the vocabulary and content of this class. It is recommended to take the course concurrently with ESL-053 and ESL-058. Prerequisite: COMPASS ESL Level III; ESL-033.

ESL-058 ESL Grammar III

Lecture 2 Lab 0 Credit 2

Grammar course for non-native speakers of English. The class studies the structures of English with particular focus on patterns in grammar that are especially troublesome for non-native speakers of English. Applications of these structures are performed through extensive speaking and writing, and a variety of exercises. It is recommended to take the course concurrently with ESL-075 and ESL-079. Prerequisites: ESL-038; COMPASS ESL Level III

ESL-073 ESL Reading/Writing IV

Lecture 2 Lab 0 Credit 2

Reading/Writing course for non-native speakers of English. Develops higher order comprehension skills such as distinguishing fact and opinion, mastering persuasion techniques. Emphasizes strategies and skills which will help increase reading speed and build vocabulary of words with multiple meanings and connotations. Leads students through the writing process by providing a wide variety of activities to help them master skills necessary to academic writing. It is

recommended to take the course concurrently with ESL-075, Listening/Speaking IV and ESL-079 Grammar IV. Prerequisite: ESL-053; COMPASS ESL Level IV.

ESL-075 ESL Listening/Speaking IV

Lecture 2 Lab 0 Credit 2

Listening/Speaking course for non-native speakers of English. Strong emphasis on comprehension of oral language as spoken by native English speakers. Continues to practice pronunciation in factual discourse. Develops skills in utilizing idiomatic expressions, negotiations, reducing miscommunication. It is recommended to take the course concurrently with ESL-073, Reading/Writing IV and ESL-079, Grammar IV. Prerequisite: COMPASS ESL Level IV; ESL-055.

ESL-079 ESL Grammar IV

Lecture 2 Lab 0 Credit 2

Advanced course in grammar for non-native speakers of English offering introduction to such structures as gerund, infinitive, different types of clauses, and conditional sentences. Students learn to apply the structures in the factual discourse in class, and in a variety of written tasks. It is recommended to take the course concurrently with ESL-073, Reading/Writing IV and ESL-075, Listening/Speaking IV. Prerequisites: ESL-058; COMPASS Level IV

ESL-080 ESL Reading/Writing V

Lecture 2 Lab 0 Credit 2

Reading/Writing course for non-native speakers of English. Provides an extensive review of the skills necessary for academic success. Explores contemporary themes to stimulate critical thinking while building language competence. It is recommended to take the course concurrently with ESL-081, Listening/Speaking V, and ESL-082, Grammar V. Prerequisites: ESL-073; COMPASS ESL Level V

ESL-081 ESL Listening/Speaking V

Lecture 2 Lab 0 Credit 2

Listening/Speaking course for non-native speakers of English. Listening to live and audio-taped, authentic lectures, taking notes and making oral presentations based on research utilizing visual aids and support. It is recommended to take the course concurrently with ESL-080, Reading/Writing V, and ESL-082, Grammar V. Prerequisites: ESL-075; COMPASS ESL Level V

ESL-082 ESL Grammar V

Lecture 2 Lab 0 Credit 2

Grammar course for non-native speakers of English. A survey of English grammar with emphasis on the production of more complex

verb and sentence structures. Mastering the learned skills through the applications in a natural discourse, peer interaction, group discussions. It is recommended to take the course concurrently with ESL-080, Reading/Writing V and ESL-081, Listening/Speaking V. Prerequisites: ESL-079; COMPASS ESL Level V

FIN Finance

FIN-121 Personal Finance

Lecture 3 Lab 0 Credit 3

A study and evaluation of financial problems which individuals and families encounter within their personal affairs. The topics covered are budgeting, saving, consumer credit, personal insurance, renting or owning a home, investments, transportation and taxes.

FIN-130 Principles Of Finance

Lecture 3 Lab 0 Credit 3

An examination of the tools and techniques used in the world of finance. This course will introduce the student to basic financial concepts such as time value of money, asset valuation, risk analysis and return on investment. Evaluation and decision-making techniques will be used as they pertain to financial management in various business situations. Prerequisites: ACC-142, ACC-146 and ECN-120.

FLS Foreign Language-Spanish

FLS-141 Elementary Spanish I

Lecture 3 Lab 2 Credit 4

This is an introductory course for those with no prior background in Spanish. Student is introduced to language skills of understanding, speaking, reading and writing with emphasis given to the first two skills. Related lab activities.

FLS-142 Elementary Spanish II

Lecture 3 Lab 2 Credit 4

A continuation of FLS-141 emphasizing all four language skills with special attention to further development of conversational skills. Cultural readings and lab activities. Prerequisite: FLS-141 or C grade on Proficiency Test, or permission of instructor.

GEO Geography

GEO-121 World Regional Geography

Lecture 3 Lab 0 Credit 3

The study and analysis of the major physical and cultural elements of the world. Emphasis on processes of acquiring, treating, and evaluating related information. For those with little or no prior background in the study of geography.

GEO-141 Economic Geography

Lecture 3 Lab 0 Credit 3

The examination of the uneven and real distribution of production, exchange, and consumption, extractive industries, manufacturing, agriculture, transportation and services in relation to human techniques, resource potentials, demographics. Some prior background in geography helpful.

GEO-161 Regional Landscapes Of North America

Lecture 3 Lab 0 Credit 3

The examination of the physical and cultural features of the United States and Canada. Emphasis on influence of environment on patterns of settlement, agricultural and industrial development, urbanism, land use and planning. Some prior background in geography helpful.

GEO-922 Field Studies

Lecture 0 Lab 0 Credit 1

This course is open to students who desire to participate in selected geographic field experiences designed around supervised observation and practice. The experience provides an opportunity to apply classroom learning in the field. Specific written credit and participation requirements are established in advance of the field study. Each hour of credit requires a minimum of 54 hours of supervised travel and living experience.

GRA Graphic Communications

GRA-116 Digital Preflight Production

Lecture 2 Lab 2 Credit 3

The main focus of this course is in preflighting techniques and color control. Advanced graphic design, color management skills, and printing technologies will be used in complex projects. The importance of communication between printer/pressroom and the graphic designer is also emphasized. This course integrates all facets of the graphic communications coursework and should be taken during the student's final semester.

Prerequisites: GRA-275 and GRA-131.

GRA-127 Illustrator I

Lecture 2 Lab 2 Credit 3

This course is designed to introduce the student to the application of rendering techniques. Emphasis is placed on controlling various media, methods, surfaces, design problems and the appropriate media selection process. Prerequisites: CSC-110 and ART-120.

GRA-137 Digital Design

Lecture 2 Lab 2 Credit 3

The student will gain familiarity with the function of graphic layout using electronic pagination software. Emphasis will be placed on publication design, development, reproducibility, and utilization of proper design techniques. Students will use this publishing package to create a variety of print media. Prerequisite: CSC-110.

GRA-140 Digital Imaging

Lecture 2 Lab 2 Credit 3

This course is designed to introduce the student to image manipulation software used in the electronic and print media industry. Emphasis will be placed on scanning, image editing techniques, using painting tool sets, color correction, ethics and digital photography techniques. Prerequisite: CSC-110.

GRA-158 Web Multimedia

Lecture 2 Lab 2 Credit 3

An introduction to the creation of multimedia for use with Web pages, kiosks, and CD/DVD. Video camcorders, digital cameras, digital recorders, touch screens, and iPods will be utilized in conjunction with computer hardware and software for media creation and manipulation. Media covered in the course will include podcasting, streaming video, streaming audio, live broadcasts, and presentations."

GRA-166 Web Animations

Lecture 2 Lab 2 Credit 3

Animation can be an important part of information transfer from a Web site to the viewer. Topics will include when animation is an appropriate tool to use, when animation should be avoided, what tools are the current standard for Web animation, and how animation can be used to present information. The class will be project-based, with the student solving animation-related problems based on real business situations.

GRA-173 Typography

Lecture 3 Lab 0 Credit 3

This course is designed to provide the student with an introduction to the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, identification, type aesthetics, communicative aspects and production problems. A working knowledge of type in relation to images will be emphasized. Prerequisite: GRA-175.

GRA-175 Graphic Design Principles

Lecture 3 Lab 0 Credit 3

A beginning course in designing printed pieces. This course will provide the student with an introduction to some of the basic principles of design aesthetics for print and web media. A history of the desktop publishing process, basics of communication, basic document structure, typography, use of color and illustration will be covered.

GRA-190 Electronic Media Projects

Lecture 1 Lab 4 Credit 3

Students will interview originators to determine target audience, message, and time and cost constraints for a project. They will then use various pagination software and graphic design skills to produce finished, print-ready pieces. Prerequisites: GRA-137 and GRA-175 or BCA-240.

GRA-275 Advanced Graphic Design

Lecture 2 Lab 2 Credit 3

This course is designed to continue to guide the student in proper design and layout aesthetics. Emphasis will be on utilization of design principles and techniques for both short and long documents, publication planning, budgeting, scheduling, finishing processes, and working with outside printing companies. Prerequisite: GRA-175.

GRA-299 Electronic Portfolio

Lecture 2 Lab 2 Credit 3

Electronic Portfolio will help prepare the student for the next step, whether that is moving into the work force or presenting to the teachers at a four-year institution. Skills taught in this class will include preparation of an electronic portfolio, career-advancement skills, resume writing, and interviewing. Prerequisites: GRA-140, GRA-158, GRA-166 and WDV-101."

GRA-932 Internship

Lecture 0 Lab 15 Credit 3.7

This course is designed to provide the student with a practical experience in graphics communication prior to completion of the

associate of science/career option degree.

The internship is supervised by the program coordinator and should be taken during the student's final semester. Prerequisite: Fifty-five hours completed toward the graphic communications technology program.

HEQ Heavy Equipment

HEQ-131 Safety And Introduction To Heavy Equipment

Lecture 2 Lab 2 Credit 3

This is an introduction to the equipment, jobs, working conditions, maintenance, and safety of equipment operation.

HIS History

HIS-131 World Civilization I

Lecture 3 Lab 0 Credit 3

This course is an economic, social, political and cultural survey of world civilization from earliest times to 1300, as these areas relate to contemporary civilization. Areas covered include: history of primitive, ancient, medieval religions, government and law; far Eastern and ancient European philosophy; primitive and ancient medieval fine arts.

HIS-132 World Civilization II

Lecture 3 Lab 0 Credit 3

This course is an economic, social, political and cultural survey of development of world civilization from 1300 to the present. It is a continuation of HIS-131. However, students may enter during any semester.

HIS-151 Us History To 1877

Lecture 3 Lab 0 Credit 3

A survey of American social, political, economic and intellectual developments from the Colonial period to 1877.

HIS-152 Us History Since 1877

Lecture 3 Lab 0 Credit 3

A survey of American social, political, economic and intellectual developments since 1877.

HIS-211 Modern Asian History

Lecture 3 Lab 0 Credit 3

An introduction to the three dominant societies of modern Asia: China, Japan and India. Emphasis will be given to the transformation of cultural, economic, intellectual and social patterns brought about by the military power and economic demands of contemporary Western societies.

HIS-251 US History: 1945 To Present

Lecture 3 Lab 0 Credit 3

An intensive study of the history of the United States since 1945, with an emphasis upon America's national and international problems during this period.

HIS-266 The Civil War

Lecture 3 Lab 0 Credit 3

A study of the United States during the Civil War. A study of the political, social, economic, military, and diplomatic history of the United States from 1850 to 1877. A look at the causes of the Civil War, the War and its impact on US society, and the aftermath of the war.

HIT Health Information Technology

HIT-211 Basic Medical Insurance & Coding

Lecture 2 Lab 2 Credit 3

This course is designed to assist students in understanding the complexities of current insurance procedures encountered in today's medical facilities. The student will be familiarized with claims submission for programs such as Blue Cross/Blue Shield, Medicaid, Medicare, CHAMPUS/CHAMPVA, and Worker's Compensation. A comprehensive unit on CPT Procedural Coding as well as ICD-9-CM Diagnostic Coding is incorporated into the course. Managed health care is explored in depth. Prerequisites or Corequisites: HSC-114 and BIO-163.

HIT-320 Health Records Management

Lecture 1 Lab 2 Credit 2

Explores the role of the health information professional in the management of health records. The course emphasizes the components, regulations and maintenance life cycle of health information in paper and electronic formats. Examines purpose of accreditation and regulatory standards in development of health record practice guidelines and the evolving role of the computerized applications. Corequisites: HSC-114 Medical Terminology

HSC Health Sciences

HSC-114 Medical Terminology

Lecture 2 Lab 2 Credit 3

This course is designed to study the basic language related to medical science with emphasis on word analysis, construction, definitions, pronunciations, spelling and standard abbreviations.

HSC-141 Pharmaceutical Applications

Lecture 1 Lab 0 Credit 1

This course provides information on the classification of drugs, their generic names, and normal routes of administration. Accurate spelling is emphasized.

HSC-144 Pharmacology

Lecture 2 Lab 0 Credit 2

This course introduces essential concepts of pharmacology, including drug legislation, terminology, and pharmacology therapy in the clinical management of patient care. It also provides an overview of commonly prescribed drugs, their classifications, uses, and side effects. Concentration on spelling and pronunciation is emphasized. Prerequisites: HSC-114, BIO-163.

HSC-163 Nutrition

Lecture 3 Lab 0 Credit 3

Nutrition concepts across the lifespan are presented. An emphasis on weight management, obesity avoidance and prevention of common diseases (diabetes, heart disease, cancer and hypertension) that are dietary-related are discussed. Proper nutrition, a critical component for optimal learning, growing, healing and quality of life is emphasized.

HSC-168 Nurse Aide

Lecture 36 Lab 20 Credit 3.5

This course meets the training requirements of the Omnibus Reconciliation Act of 1987 (OBRA) for aides working in Nursing Facilities and Skilled Nursing Facilities. Emphasis in the course is on students achieving a basic level of knowledge and demonstrating skills to provide safe and effective care. Prerequisites: Student must be 16 years or older and pass a background check.

HSC-181 First Aid/Cpr For Non-Health Care Workers

Lecture 1 Lab 1 Credit 1.5

This course follows the American heart Association Basic Life Support (CPR) Heart Saver for the Lay Person. It includes AED and basic first aid. This course is not for health care workers.

HUM Humanities

HUM-114 Multicultural Perspectives

Lecture 3 Lab 0 Credit 3

Selected readings from the critical perspectives of race, class and gender will provide the theoretical framework for class discussions. At the same time, films and works of literature from different cultural points of view will help students reach a new understanding of their own and other cultures and will open themselves up for a multicultural understanding of society.

HUM-145 Language And Society

Lecture 3 Lab 0 Credit 3

This course is an introduction to sociolinguistics exploring the relationship between social and linguistic behavior. Analyzes factors influencing the choice of sounds, grammatical elements, and vocabulary; it codes the social function of a language. Focuses on the history of the language, various dialects, jargon, slang and differences between male and female language.

HUM-287 Leadership Development Studies

Lecture 3 Lab 0 Credit 3

This course is designed to provide emerging and existing leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. The course integrates readings from the humanities, experiential exercises, films/videos and contemporary readings on leadership.

IND Industrial Technology

IND-103 Machine Shop

Lecture 1 Lab 2 Credit 2

This course identifies the tools commonly used in a machine shop and their components as well as how each tool is used for a particular job. Students will learn how to use every day hand tools. Students will learn skills on various tools such as milling machines, drill presses, band saws, grinders, and precision instruments. They will learn how to select, size, and install a variety of different types of piping, fittings, and valves.

IND-104 Industrial Pumps

Lecture 0.5 Lab 1 Credit 1

This course discusses the principles and applications of centrifugal pumps. Students will learn centrifugal pump construction, uses, system properties, monitoring, and troubleshooting techniques. Students will also learn the skills they need to select, operate, install, maintain and repair the many different types of pumps used in industry.

IND-106 Machine Shop II

Lecture 1 Lab 2 Credit 2

This course introduces students to the basics of calculating cutting speeds and feeds for machining ferrous, non-ferrous, and plastics materials on the lathe. It also demonstrates the fundamentals of mounting a chuck on an engine lathe and truing a work piece in a chuck and introduces students to the three methods of facing work to length in a chuck. The course will show students how to straight turn a work-piece to two concentric diameters in a four-jaw independent chuck. Students will learn the correct procedures for taking both roughing and finishing cuts. They will also learn to turn between centers. Finally, students will learn the proper method of finishing one end of work to one diameter, reversing the work in the chuck, and finishing the other end to another diameter. It will demonstrate how to perform four internal machining operations on the engine lathe; drilling, boring, counter-boring, and reaming. Prerequisite: IND-103.

IND-107 Valves

Lecture 1 Lab 0 Credit 1

This course gives students a fundamental understanding of the various shutoff valve constructions including wedge, ball, plug, globe, pinch, and diaphragm types, basic maintenance techniques, and the sources of many problems. From this foundation, students will be better able to develop maintenance skills through plant training programs or on-the-job experiences. The course also provides basic guidelines for installing various types of shutoff valves.

IND-141 Power Transmission

Lecture 1 Lab 2 Credit 2

This course discusses the fundamentals of mechanical transmission systems used in industry. Students will learn industrial skills on how to operate, install, analyze performance, and design basic mechanical transmission systems using chains, v-belts, spur gears, bearings, and couplings.

IND-163 Osha & Plant Safety

Lecture 2 Lab 0 Credit 2

This course relates OSHA as it applies to employers & employees engaged in a variety of businesses. Students will learn how OSHA applies to employers and employees in such varied fields as manufacturing, construction, agriculture as well as other work environments.

IND-179 Boiler Operation And Control

Lecture 1 Lab 2 Credit 2

This course is designed to help students understand the evolution of the boiler system from the first century to modern day and understand the principles and applications of steam traps. This course will provide an overview of the operation of the boiler plate system, beginning with basic principles of steam energy and boiler plate design. This course will describe steam, steam trapping and different types of steam traps including sizing, installation and monitoring.

IND-180 Industrial Heating And Cooling

Lecture 1 Lab 2 Credit 2

This course is designed to help students understand the fundamentals of HVAC & R. The students will learn chiller, air handler, cooling tower, and condenser operations as well as how to perform basic preventative maintenance tasks. The course also shows how preventative maintenance practices can be used in troubleshooting common HVAC & R problems.

LIT Literature

LIT-101 Introduction To Literature

Lecture 3 Lab 0 Credit 3

Designed to promote an appreciation of excellence in literature through illustrative types of short fiction, poetry, and drama. Emphasis is placed on the reader's interpretive skills in examining an author's craft, intent, and format.

LIT-120 American Novel

Lecture 3 Lab 0 Credit 3

A survey of the American novel with emphasis on 20th century works.

LIT-121 American Short Story

Lecture 3 Lab 0 Credit 3

A survey of the American short story from Edgar Allen Poe to the present.

LIT-131 Native American Literature

Lecture 3 Lab 0 Credit 3

A survey of all genres, fiction and non-fiction, produced by Native Americans. Elements of study include the oral tradition influences, regional folklore, and autobiographical and historical materials created by contemporary and historical Native American authors. Off-campus visits to centers of Native American study will be conducted whenever possible.

LIT-150 World Literature I

Lecture 3 Lab 0 Credit 3

A survey of important works of literature from the ancient world through the Renaissance. This will include selections of prose, poetry, and drama that represent the spirit of the times in which they were written.

LIT-209 Forms Of Literature: Film Adaptation

Lecture 3 Lab 0 Credit 3

Focuses on the relationship between literary works (fiction, drama, nonfiction, poetry or graphic literature) and their adaptations to film. Students explore the adaptation of literature to film; how the elements of plot, character, setting, point of view, symbol, and theme are adapted or altered from literature to film; and how film adaptations influence our understanding of both literature and film. Prerequisite: C- or above in ENG-105.

MAP Medical Assistant

MAP-121 Administrative Procedures I: Medical Office

Lecture 2 Lab 4 Credit 4

This course is designed to acquaint students with the front-office administrative responsibilities of the medical assistant. The student will develop competency in written communication skills, including editing practice, sentence revision, paragraph writing and exercises in grammar, mechanics and usage. Other competencies will include appointment scheduling, telephone techniques, recording and filing medical records, processing mail, billing and collection procedures, banking services, accounting methods and payroll preparation. The student will also be introduced to preparation of professional medical meetings, travel arrangements and development of professional reports. The content of the course is adapted to the 2003 approved standards of CAAHEP.

MAP-122 Administrative Procedures II: Medical Office

Lecture 2 Lab 2 Credit 3

This course introduces basic computer concepts and emphasizes the practical applications approach using simulated medical office management programs. The student is guided through a series of computer applications that highlight the most common aspects of the modern medical office including electronic claim filing. Resume development and job-seeking skills are also presented. Prerequisites: HSC-114, MAP-431, MAP-105, MAP-121, MAP-364, BIO-163.

MAP-128 Introduction To Electronic Health Records

Lecture 1 Lab 2 Credit 2

Introduction to Electronic Health Records involves the student in the management and application of health records. This includes the implementation and management of electronic schedule, creating patient medical record, management of immunization, electronic correspondence, laws and regulation of medical records. Prerequisite: 35 nwpm timed typing test score. Corequisite: MAP-121.

MAP-364 Clinical Procedures For Medical Office I

Lecture 3 Lab 8 Credit 7

This course includes the numerous competencies required to assist the physician with patient examinations. Fundamental skills include: aseptic techniques and the sterilization of medical supplies; the psychological and physical preparation of the patient for a medical examination; preparation of surgical trays and assisting with minor surgeries; and the performance of routine urinalysis as ordered by the physician. Prerequisite: Acceptance into the program.

MAP-369 Clinical Procedures For Medical Office II

Lecture 4 Lab 6 Credit 7

This course is designed to acquaint the student with the knowledge and skills required in the preparation, administration and documentation of various forms of medications. Dosage calculations and the physiological actions of drugs on the human body are addressed. Students will gain knowledge of venipuncture and use of quality controls. The student will gain knowledge of blood chemistries, serology, microbiology and hematology. Student will gain knowledge regarding the electronic medical record and its application in the clinical setting. Prerequisite: Successful completion of all fall semester curriculum.

MAP-370 Specialty Procedures

Lecture 2 Lab 4 Credit 4

This course expands on basic clinical procedures with advanced theory, techniques and knowledge in specialty procedures and practice. Students will also focus on knowledge and skills to prepare and respond to emergency situations in a medical practice. Prerequisite: MAP-364. Corequisite: MAP-369.

MAP-401 Medical Law And Ethics

Lecture 1 Lab 0 Credit 1

This course is designed to expose the student to legal concepts of standard of care, scope of employment, criminal and civil acts, contract, negligence and ethical concepts.

MAP-431 Human Relations

Lecture 1 Lab 0 Credit 1

This course includes the study of the fundamental principles related to human relations, self-improvement, professional appearance and attitudes, limitations, and behaviors. Principles of individualized client care and etiquette of the medical practice are emphasized.

MAP-532 Human Body: Health & Disease

Lecture 3 Lab 0 Credit 3

This course is designed to acquaint the student with the basic concepts and characteristics of disease processes, to impart basic knowledge of the etiology of the disease and to enable the student to understand the relationship between clinical signs and the disease process. Diagnostic tests and common treatments will be discussed. Concepts of Health promotion and client education will be emphasized. Prerequisite: BIO-163.

MAP-602 Clinical Externship Seminar

Lecture 1 Lab 0 Credit 1

A discussion of job related problems and study of current medical office procedures and clinical skills. Prerequisites: All previous program classes and student must successfully complete and obtain the mandatory reporter certificate for adult and child abuse. Corequisite: MAP-615.

MAP-615 Clinical Externship

Lecture 0 Lab 20 Credit 5

Following successful completion of the academic hours, the student is placed in a selected physician's office for a two-month required clinical practicum, working directly under supervision. A balance of learning experiences in both the administrative and clinical areas of the medical facility will be provided for the student during this training period. Students do not receive monetary compensation for externship experience. Prerequisites: All previous program classes and student must successfully complete and obtain the mandatory reporter certificate for adult and child abuse. Corequisite: MAP-602.

MAT Mathematics

MAT-052 Pre-Algebra

Lecture 2 Lab 2 Credit 3

Designed for students who have not mastered the basic skills of arithmetic or for students who need to review arithmetic. Topics studied include operations on whole numbers, fractions, decimals, percents, measurement, basic statistics, beginning geometry and beginning algebra. These topics are similar to those topics covered in Math Skills I and II with an emphasis on problem solving techniques. Prerequisites: COMPASS Pre-Algebra score of 22-49 or ACT Math score 14-17 or math faculty approval.

MAT-062 Elementary Algebra

Lecture 2 Lab 2 Credit 3

This course is a beginning level course for students needing a start, or fresh start, in algebra. Topics covered include signed numbers, linear equations, polynomials, factoring, square roots, quadratic equations, and graphing. Prerequisites: Completion of MAT-052 with a grade of at least C- or Pre-Algebra COMPASS score of 50-99 or ACT Math score of 18-19 or math faculty approval.

MAT-092 Intermediate Algebra

Lecture 3 Lab 2 Credit 4

This course is designed as an intermediate level algebra course recommended for students with at least one year of high school algebra or equivalent. It serves as a foundation for many other math, science, and business courses. Computer-assisted tutorials and/or graphing calculator instruction may be covered in the lab portion of this course. Students will learn to apply algebraic models and standard solution methods to applied and theoretical problems, using technology when appropriate. Topics include sets, linear equations and inequalities, systems of linear equations, exponents, polynomials, rational equations, radical equations, quadratic functions, graphing transformations, and logarithmic equations. Prerequisite: MAT-062 with a grade of at least C- or equivalent, or COMPASS Algebra score of 20 or higher or ACT Math score of 20-21 or math faculty approval.

MAT-094 Independent Study - Math

Lecture 0 Lab 2 Credit 1

This course is designed to provide the student an opportunity to select a specific mathematical area to explore in greater depth than is possible in other available courses. Independent Study topics will be determined by consultation between the student and instructor. Typical topics could include geometry, trigonometry, estimating, carpentry/

mechanical/electrical preparation, etc. Credit earned in this course will not count toward the A.A., A.S., or A.A.S. degree requirements.

MAT-110 Math For Liberal Arts

Lecture 3 Lab 0 Credit 3

Math for Liberal Arts is a survey course for students who have little background in mathematics. Topics include survey of sets, numbers, algebra, geometry, probability, and statistics. This course is not intended for Mathematics and Science majors. Prerequisites: MAT-062 with a grade of at least C- or equivalent or COMPASS Algebra score of 20 or higher or ACT Math score of 20-21 or math faculty approval.

MAT-112 Math For Elementary Teachers I

Lecture 3 Lab 0 Credit 3

Mathematics for Elementary Teachers is a first mathematics course for students who want to pursue a major in elementary education. The course will use a variety of problem-solving skills while exploring many aspects of the real number system. Algebraic and concrete mathematical models will be incorporated in strategies used to solve problems. Prerequisite: One year of algebra.

MAT-113 Math For Elementary Teachers II

Lecture 3 Lab 0 Credit 3

Mathematics for Elementary Teachers II is a second mathematics course for students who want to pursue a major in elementary education. The course will use a variety of problem-solving skills while exploring the many aspects of geometry and data analysis. Applications using concrete and pictorial models will be incorporated in strategies used to solve problems. Prerequisite: C- or above in MAT-112.

MAT-117 Math For Elementary Teachers I

Lecture 3 Lab 3 Credit 4.5

Basic mathematical content pertinent to elementary teaching. Topics include problem solving, set theory, number systems and bases, number theory, informal geometry, measurement and elementary probability, and statistics. Does not count toward the mathematics requirement for the AA or A.S. degree.

MAT-127 College Algebra And Trigonometry

Lecture 5 Lab 0 Credit 5

The study of rational, exponential, logarithmic, and polynomial functions and relations, their graphs and related equalities. The study of the circular functions, graphs, and applications. Vectors, trigonometric properties, equations, identities and complex numbers are treated extensively. Prerequisite: MAT-092 with a grade of at least C- or equivalent or COMPASS Algebra score of 73-92 or ACT Math score of at least 25 or math faculty approval.

MAT-128 Precalculus

Lecture 4 Lab 0 Credit 4

This course encompasses an in-depth review of mathematical concepts necessary in preparing students for the calculus. Problem solving is emphasized. Topics from algebra, trigonometry, and analytic geometry essential in the calculus are covered in this course. Topics include: properties of lines and quadratics, absolute value equations and inequalities, functions and their graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, analytic trigonometry, vectors, conics in both the rectangular and polar coordinate systems, parametric equations, systems of equations and inequalities, matrices, three-dimensional coordinate geometry, partial fractions, sequences and mathematical induction. Prerequisite: MAT-127 or equivalent.

MAT-140 Finite Math

Lecture 3 Lab 0 Credit 3

This course is designed for Business and Social Science majors, It introduces them to matrix solutions, to linear equations, linear programming, matrix algebra, mathematics of finance, computer applications, value of slope of a straight line, and exponential/logarithmic functions. Application problems are taken from Business Management and Social Science areas. Prerequisite: 3 years of high school college prep math AND an ACT score of at least 23 or COMPASS Algebra score of 73-92 or MAT-092 with a grade of at least C-.

MAT-156 Statistics

Lecture 3 Lab 0 Credit 3

This course is an applied course in statistics, designed to introduce students to some of the concepts, symbols, procedures, and vocabulary used in the field of statistics. Topics covered in this course include: organizing and graphing data, descriptive statistics, probability, various distributions, the sampling distribution of the mean, estimating a population mean,

confidence intervals, inferential statistics (hypothesis testing), comparing two population parameters, analysis of variance, correlation, simple linear and multiple regression, contingency tables, and nonparametric statistics, (time permitting). Prerequisites: MAT-092 with a grade of at least C- or COMPASS Algebra score of 55 (or higher) or ACT score of 22 or above or math faculty approval.

MAT-165 Business Calculus

Lecture 3 Lab 0 Credit 3

This course is intended for Business Management and Social Science majors. It introduces them to theorems for finding derivatives, applications to maximum and minimum, related rates, graphing of functions, marginal cost and revenue, supply and demand, partial derivatives, antiderivatives, definite integral, tests for increasing and decreasing functions, concavity, maximum and minimum of functions of more than one variable, area under a curve, separable differential equations, growth and decay, and applications of the above to Business Management and Social Sciences. Prerequisite: 3 years of high school college prep math AND an ACT score of at least 25 of COMPASS Algebra score of 73-92) OR MAT-127 (or college algebra) with a grade of at least C-.

MAT-210 Calculus I

Lecture 4 Lab 0 Credit 4

This course includes the study of limits and continuity, derivatives and differentiation, differentials, maximum and minimum function values and techniques of graphing, applications, and an introduction to integration. Prerequisites: MAT-127 or MAT-128 with a grade of at least C- or COMPASS Algebra score of 93-99 (or higher) or ACT score of 29 or above or math faculty approval.

MAT-216 Calculus II

Lecture 4 Lab 0 Credit 4

The study of integration, techniques of integration, applications and accompanying mathematical structure. Prerequisite: MAT-210 or math faculty approval.

MAT-219 Calculus III

Lecture 4 Lab 0 Credit 4

Multivariable calculus is to cover topics from the functions of several variable and vector valued functions. The course includes directional derivative, gradients, the curl, the divergence, multiple integrals over regions and volumes. Line and surface integrals will be covered. Double integral in the polar coordinates will be done. Prerequisite: MAT-216 or math faculty approval.

MAT-702 Introduction To Math Applications

Lecture 2 Lab 2 Credit 3

This course is offered to students who can profit from an applied course in mathematics and will prepare students who need to develop skills for MAT-704. It is designed as an introductory level algebra course recommended for students with one year of high school algebra. Emphasis is on the building of basic algebra skills and the application of these mathematical techniques. The course studies the relationship of geometry and algebra as they apply to various fields. This course will also cover whole numbers/decimals, integers, fractions/percents, direct measurement, basic geometric concepts/relationships, linear equations, and right-triangle trigonometry. Prerequisite: MAT-052 or Pre-Algebra COMPASS score of 50-99 or ACT Math score of 18-19 or math faculty approval.

MAT-704 Math Applications

Lecture 5 Lab 0 Credit 5

This course is offered to technical and other students who can profit from an applied course in mathematics. It is designed as an intermediate level algebra course recommended for students with at least one year of high school algebra. Emphasis is on the application of mathematical techniques. Students will study the relationship of geometry and algebra as they apply to electronics and mechanical technology problems. Algebraic manipulation of formulas, equations, radicals, exponents, logarithms, polynomials, rational expressions, systems of linear equations, plane trigonometry, vectors, and graphs of equations are studied. Prerequisite: MAT-062 or MAT-702 or COMPASS Algebra score of 20 or higher or ACT Math score of 20-21 or math faculty approval.

MAT-726 Machine Shop Mathematics I

Lecture 4 Lab 0 Credit 4

Review of basic arithmetic operations, practical algebra, geometry, and trigonometry. The application of these math functions for the machine shop will be stressed.

MAT-730 Machine Shop Mathematics II

Lecture 3 Lab 0 Credit 3

Oblique triangle laws are introduced with emphasis placed on practical and more difficult shop related problems. Prerequisite: MAT-726.

MAT-772 Applied Math

Lecture 3 Lab 0 Credit 3

This course is designed to acquaint the student with the mathematics necessary to function within technical careers and to

become a more aware consumer. Topics include: review of arithmetic operations; measurement; metric system; fundamentals of geometry; introductory statistics and probability; graphs; and elementary algebra concepts with emphasis on applications.

MFG Manufacturing

MFG-156 Introduction To Cnc Machining

Lecture 1 Lab 4 Credit 3

Introduces basic operations of a CNC turret press. Covers basic and advanced tooling, programming using G & M code and CAM software. Emphasizes teamwork, critical thinking and problem solving through hands-on experience and practical applications.

MFG-165 Engineering Materials

Lecture 3 Lab 0 Credit 3

A study of materials, their production, properties and uses in engineering design. Ferrous and nonferrous metals, polymeric and ceramic materials are covered. Methods of selecting acceptable materials based on their costs, availability and properties are discussed. Pre or Corequisites: PHY-106 or PHY-160 and MFG-212.

MFG-206 Manufacturing Processes I

Lecture 1 Lab 4 Credit 3

Basic course in measurements related to manufacturing, material removal, hard mold casting, powder metallurgy, plastics and rubber, material shearing, material forming, the use and manufacture of screw threads, abrasive removal methods, automation and introduction to numerical control. Lab sections demonstrate and give hands-on experiences in reading simple blue prints, layout, measurements and machining on tool room quality machine tools. Prerequisite: MAT-702.

MFG-209 Machine Shop Practices

Lecture 1 Lab 4 Credit 3

Classroom and hands on training will be provided in machine shop safety and the use of machine shop tools and machines. Training will include proper use of hand tools, measuring tools, milling machines, grinders, lathes, drills and saws."

MFG-212 Basic Machine Theory

Lecture 1 Lab 4 Credit 3

Introduction to basic machining processes involving drill press, lathe, mills, drills, saws, bench tools, measuring tools, and grinders. Classes will cover safety, tooling, metal removal methods, and different various pieces of equipment.

MFG-228 Machine Operations II

Lecture 2 Lab 4 Credit 4

Covers advanced setup and operation of lathes, mills and grinders using different materials and cutters. Productivity and safe operation are emphasized. Prerequisite: MFG-237.

MFG-237 Introduction To Machine Trades

Lecture 1 Lab 4 Credit 3

Explores basics of machining, raw materials, use of hand tools, safety and maintenance. Includes measurement techniques, materials, safety, machine tool math, quality control and maintenance. Emphasizes teamwork, critical thinking and problem solving through hands-on experience and practical applications. Corequisite: MAT-702.

MFG-303 Advanced Cnc Programming

Lecture 3 Lab 6 Credit 6

Continuation of MFG-156, Introduction to CNC Machining adding canned cycles, looping, sub-routines and interpretation of programs written by others. Internal machining on the lathes is covered. More complex parts and production of multiple parts will be undertaken. Prerequisite: MFG-156.

MFG-323 Mastercam Design

Lecture 1 Lab 2 Credit 2

This course provides an introduction to computer aided design and drafting. Actual hands-on experience in designing, drawing, and dimensioning, surface and solid modeling using Mastercam Design software will be provided. The course presents logical step-by-step instruction about the Mastercam commands, drawing aids, shortcuts and other valuable characteristics of Mastercam. This course will also feature 2D geometry and dimensioning, creating 3D surface geometry and 3D solids geometry and using Mastercam Software to create Solid models using wireframe geometry. Finished copies of the students' work will be made on a printer or plotter.

MFG-511 Lean Quality Manufacturing

Lecture 3 Lab 2 Credit 4

This course introduces the student to the basic principles of lean manufacturing and quality control inspection tools.

MFG-520 Predictive Maintenance

Lecture 1 Lab 2 Credit 2

This course discusses the principles of machinery oil analysis, thermography, ultrasonics and machine vibration. Students will learn how to properly diagnose an equipment failure. Students will also learn steps to prevent equipment failures and

keep equipment running efficiently.

MGT Management

MGT-101 Principles Of Management

Lecture 3 Lab 0 Credit 3

This course provides an intensive examination of the basic fundamentals of organization and management underlying the solution to management problems.

MGT-130 Principles Of Supervision

Lecture 3 Lab 0 Credit 3

This course provides an overview of the principles involved in supervision, including planning, organizing, motivating, staffing and appraising. Also covered are interpersonal skills including communication, decision making, conflict and team work.

MGT-170 Human Resources Management

Lecture 3 Lab 0 Credit 3

This course provides an overview of the principles involved in human resources management including strategy, legal environment, EEO, and job analysis and job design. Also covered are acquiring human resources, training and developing employees, compensation issues, and labor relations.

MKT Marketing

MKT-110 Principles Of Marketing

Lecture 3 Lab 0 Credit 3

This introductory class uses the managerial approach to study a market-directed system of marketing. The emphasis is on market strategy planning from the viewpoint of the marketing manager. The "4 Ps" -product, place, price, and promotion-provide the structure underlying the organization of this course.

MKT-121 Digital Marketing

Lecture 2 Lab 2 Credit 3

A complete overview of how to promote a business online, this course covers the basics of traditional marketing before going on to explore how these core concepts can be specifically applied to digital media. Students will learn the role that websites, social media, search engine placement, email and mobile marketing play in their overall marketing strategy and how best to take advantage of each."

MKT-140 Principles Of Selling

Lecture 3 Lab 0 Credit 3

Fundamental terminology, principles and techniques of direct and indirect selling as well as promotional methods. Emphasis on human behavior and the motivation, rewards,

duties, and qualifications of a person in sales. This course is designed for an individual preparing for initial or improved employment.

MKT-150 Principles Of Advertising

Lecture 3 Lab 0 Credit 3

A detailed look into the study and practice of advertising with special emphasis placed on allowing students to plan and think more strategically, evaluate alternative courses of action, develop more creative solutions to problems, analyze why people behave the way they do, express themselves and their ideas, and persuade others to their point of view by using advertising terms, concepts, and procedures. Prerequisite: MKT-110 or MKT-121.

MKT-154 Visual Merchandising

Lecture 2 Lab 0 Credit 2

A study of the fundamentals of retail display, including window and point-of-purchase display. Includes the relationship of display to the total promotional program, the role of the display manager, elements of display design, merchandise selection, construction materials, and the actual display construction. Prerequisite: MKT-110.

MKT-160 Principles Of Retailing

Lecture 3 Lab 0 Credit 3

Retailing organization, buying, selling, promotion, inventory control, pricing and location and layout.

MMS Mass Media Studies

MMS-111 Video Production

Lecture 1 Lab 4 Credit 3

Video Production introduces video equipment operation, techniques in video production, and specific production skills, including proper use of the non-linear editing systems, microphones, cameras, lighting equipment and tripods. For approximately 50 percent of the course, students experience hands-on application of material covered in lecture. Students produce both short and long format programs.

MTR Medical Transcribing

MTR-157 Medical Documentation For Scribes

Lecture 1 Lab 2 Credit 3

Students will acquire basic and intermediate scribe and editing skills using standard reference sources. Practical experience includes transcription/editing of basic progressing to intermediate reports, this may include letters, history and physical reports, consultation reports, progress notes and office notes. Fifty

hours of scribing/editing will be completed in a practicum or simulated practice setting using electronic health record. Pre-requisites: BIO-163; HSC-141; HSC-114; MAP-431; MAP-401. Corequisites: BIO-163; HSC-141; HSC-114; MAP-431; MAP-401

MUA Music-Applied

MUA-101 Applied Voice

Lecture 1 Lab 0 Credit 1

Private instrumental and vocal instruction is available through SCC's music department. Credit is granted for the specific area studied, based on the amount of work, time and content level as specified by the instructor. Content level is based on a student's background and interest. A maximum of 8 semester hours may be earned, with content changing each time. A "juried" performance may be required at the end of each semester.

MUA-104 Applied Voice

Lecture 2 Lab 0 Credit 2

See MUA-101

MUA-106 Class Voice

Lecture Lab 2 Credit 1

Class study in voice. Fundamentals of techniques of vocal production: resonance, phonation, respiration, and performance. Basic harmony. Maximum of 4 semester hours may be earned.

MUA-108 Italian/Latin/English Diction For Singers

Lecture 2 Lab 0 Credit 2

Italian/Latin/English is the first of a two-semester two-credit hour course for singers. The course is required for vocal majors at Southeastern Community College and is also open to interested singers of all ages. Students will be introduced to the International Phonetic Alphabet and its application in fostering correct pronunciation when singing. Application of concepts through singing and written exams is an aspect of the course.

MUA-109 German/French Diction For Singers

Lecture 2 Lab 0 Credit 2

German/French Diction is the second of a two-semester course for singers. All aspects of MUA-108 are similar with the exception of language. Like MUA-108, singing and written exams make up the assessment of the success of the student.

MUA-120 Applied Piano

Lecture 1 Lab 0 Credit 1

Private instrumental and vocal instruction is available through SCC's music department. Credit is granted for the specific area studied, based on the amount of work, time and content level as specified by the instructor. Content level is based on a student's background and interest. A maximum of 8 semester hours may be earned, with content changing each time. A "juried" performance may be required at the end of each semester.

MUA-121 Applied Piano

Lecture 2 Lab 0 Credit 2

See MUA-120

MUA-122 Applied Organ

Lecture 1 Lab 0 Credit 1

Private instrumental and vocal instruction is available through SCC's music department. Credit is granted for the specific area studied, based on the amount of work, time and content level as specified by the instructor. Content level is based on a student's background and interest. A maximum of 8 semester hours may be earned, with content changing each time. A "juried" performance may be required at the end of each semester.

MUA-123 Applied Organ

Lecture 2 Lab 0 Credit 2

See MUA-122

MUA-124 Applied Guitar

Lecture 1 Lab 0 Credit 1

Private instrumental and vocal instruction is available through SCC's music department. Credit is granted for the specific area studied, based on the amount of work, time and content level as specified by the instructor. Content level is based on a student's background and interest. A maximum of 8 semester hours may be earned, with content changing each time. A "juried" performance may be required at the end of each semester.

MUA-125 Applied Guitar

Lecture 2 Lab 0 Credit 2

See MUA-124

MUA-126 Applied Strings

Lecture 1 Lab 0 Credit 1

Private instrumental and vocal instruction is available through SCC's music department. Credit is granted for the specific area studied, based on the amount of work, time and content level as specified by the instructor. Content level is based on a student's background and interest. A maximum of 8 semester hours may be earned, with content changing each time. A "juried" performance may

be required at the end of each semester.

MUA-127 Applied Strings

Lecture 2 Lab 0 Credit 2

See MUA-126

MUA-143 Applied Brass

Lecture 1 Lab 0 Credit 1

Private instrumental and vocal instruction is available through SCC's music department. Credit is granted for the specific area studied, based on the amount of work, time and content level as specified by the instructor. Content level is based on a student's background and interest. A maximum of 8 semester hours may be earned, with content changing each time. A "juried" performance may be required at the end of each semester.

MUA-146 Applied Brass

Lecture 2 Lab 0 Credit 2

See MUA-143

MUA-170 Applied Woodwinds

Lecture 1 Lab 0 Credit 1

Private instrumental and vocal instruction is available through SCC's music department. Credit is granted for the specific area studied, based on the amount of work, time and content level as specified by the instructor. Content level is based on a student's background and interest. A maximum of 8 semester hours may be earned, with content changing each time. A "juried" performance may be required at the end of each semester.

MUA-173 Applied Woodwinds

Lecture 2 Lab 0 Credit 2

See MUA-170

MUA-180 Applied Percussion

Lecture 1 Lab 0 Credit 2

Private instrumental and vocal instruction is available through SCC's music department. Credit is granted for the specific area studied, based on the amount of work, time and content level as specified by the instructor. Content level is based on a student's background and interest. A maximum of 8 semester hours may be earned, with content changing each time. A "juried" performance may be required at the end of each semester.

MUA-183 Applied Percussion

Lecture 2 Lab 0 Credit 2

See MUA-180

MUS General Music

MUS-100 Music Appreciation

Lecture 3 Lab 0 Credit 3

This is a general overview course which includes basic music concepts and elements of the art, a general historical look, and critical approach. Music as it has evolved from the beginning to present-day is studied. This involves listening to musical examples.

MUS-102 Music Fundamentals

Lecture 3 Lab 0 Credit 3

This course is designed for students who wish to learn how to read music for either further study as a major or for personal reasons. It is open to all students and is recommended for elementary education majors.

MUS-120 Music Theory I

Lecture 3 Lab 0 Credit 3

This course is offered to students who wish to increase their musicianship through better understanding of the materials and structure of music and to those who plan to major or minor in music. The general purpose of the course is to help the student gain the necessary basic concepts of music fundamentals and harmony which will support more advanced theoretical instruction. Prerequisite: MUS-102 or permission of instructor. Co-requisite: MUS-135.

MUS-135 Music Theory Lab I

Lecture 0 Lab 2 Credit 1

This course is for development of skills in reading and hearing pitch, rhythm, melodic and harmonic sounds of music. The course is based on the principal that a qualified musician must develop reading, singing and notation skills in order to achieve acuity of aural perception and make this acuity effective in the use of these skills. Co-requisite: MUS-120."

MUS-140 Concert Choir

Lecture 0 Lab 2 Credit 1

Open to all college students who enjoy the aesthetic experience of choral singing. The choir is a performing group which meets regularly and performs a wide variety of choral literature. The choir presents programs throughout the college area and presents (or performs) a concert at the end of each semester. Maximum of 4 semester hours may be earned. Content changes each semester.

MUS-150 Chamber Ensemble

Lecture 0 Lab 2 Credit 1

Chamber chorale is a select ensemble that numbers between 12 and 20 and is the traveling group representing the college.

Eligibility: should have advanced musical ability and a strong desire to perform.

Membership in concert choir is required before auditioning for chamber chorale. Final membership and number are determined by the director. A maximum of 4 semester hours may be earned. Content changes each semester. Corequisite: MUS-140.

MUS-204 History Of Rock And Roll

Lecture 3 Lab 0 Credit 3

This introductory course traces the history of rock and roll from its inception as a fusion of African-American and white music traditions amidst the youth culture of post WWII era in America to its present state as an internationally known musical style. This course will develop listening skills and incorporate extensive exposure to recorded music.

NET Computer Networking

NET-101 It Fundamentals

Lecture 1 Lab 0 Credit 1

This course will provide students with the fundamental technical knowledge about personal computers that is needed to work efficiently in the IT career field. Upon successful completion, students will be able to setup basic workstations, including installing basic hardware and software and establishing network connectivity and troubleshoot compatibility issues. It will also assist the students for preparing and taking the CompTIA IT Fundamentals exam. Prerequisites: NET-122, Computer Hardware Basics; NET-142 Network Essentials

NET-122 Computer Hardware Basics

Lecture 2 Lab 2 Credit 3

This course is designed to improve the student's understanding of computer hardware and peripherals. The student shall gain an ability to determine the source of elementary equipment problems and the ability to isolate problems relating to software and hardware. Through hands-on labs, the student will obtain and demonstrate knowledge of installation, configuration, and repair.

NET-142 Network Essentials

Lecture 3 Lab 0 Credit 3

This course is designed to provide students with the background necessary to understand the local area networking information in Microsoft courses on workstations and networking. This course provides students with the information needed to build a foundation in current networking technology for local area networks, wide area networks

and the Internet. Corequisite: CSC-110.

NET-153 Advanced Networking

Lecture 2 Lab 4 Credit 4

This course will allow the student to take knowledge from previous networking courses and apply it in a hands-on environment. The Microsoft network operation system will be emphasized. The student will also receive exposures to other advanced technologies. These technologies may include: switch/router configuration, computer forensics, computer ethics and cryptography. Prerequisites: NET-122, NET-142, NET-310, NET-314.

NET-310 Virtual Machines

Lecture 2 Lab 2 Credit 3

This course will cover the concepts of virtualization including hardware and software. Topics will include benefits vs. risks analysis, installation and configuration, operation and maintenance and disaster recovery using server and workstation virtualization techniques. Creation and administration of Virtual Desktop environments will also be covered. Prerequisites: NET-142 and NET-442."

NET-314 Windows Server

Lecture 2 Lab 4 Credit 4

Windows Server covers the issues of setting up a client/server environment using Windows Server software. The course begins with file server basics. Determining the cost of a network and choosing appropriate network hardware are included. Students will receive hands-on experience in preparing client computers, installing Windows Server software and setting up a complete client/server environment. They will learn how to configure a domain environment with DNS, DHCP, and remote access. There will be hands-on troubleshooting in the labs. Prerequisite: NET-122 and NET-142.

NET-442 Linux Operating System

Lecture 2 Lab 2 Credit 3

This course will cover the essentials of installing, configuring, maintaining, administering and troubleshooting the Linux operating system.

NET-637 Network Intrusion Investigation

Lecture 2 Lab 2 Credit 3

This course enables students to use penetration-testing tools and techniques that ethical hackers and security testers utilize to protect computer networks. Skills and techniques include foot printing, social engineering, port scanning, enumeration and cryptography. This course incorporates a lab component in which students

practice skills designed to secure network connections and prevent attacks. Prerequisites: NET-142, NET-314, and NET-442.

NET-716 Database Administration/Service Application

Lecture 2 Lab 2 Credit 3
Database Administration/Service Application will provide the student with experience installing, configuring, maintaining, and administering SQL Server and SharePoint. The key concepts of Structured Query Language are studied, including the basic structure of relational databases, how to read and write simple and complex SQL statements and advanced data manipulation techniques.”

NET-717 Email Applications

Lecture 2 Lab 2 Credit 3
This course will provide the student with experience installing, configuring, maintaining, and administering Exchange Server, as well as, an Exchange hybrid environment, where part of the mailboxes can be hosted in the cloud. Prerequisite: NET-314.

NET-820 Network Internship

Lecture 0 Lab 15 Credit 3.7
This course is designed to provide the Network Administration & Cyber Security student with a practical experience in information technology prior to completion of the Associate of Applied Science degree. The internship is supervised by the program coordinator and should be taken during the student’s last spring or fall semester on campus. Prerequisite: Fifty hours completed towards IT degree as a Network Administration & Cyber Security, including CIS-504.

NET-825 Internet/Web Internship

Lecture 0 Lab 15 Credit 3.7
This course is designed to provide the Web Design and Administration student with a practical experience in information technology prior to completion of the Associate of Applied Science Degree. The internship is supervised by the program coordinator and should be taken during the student’s last spring or fall semester on campus. Prerequisite: Fifty hours completed towards IT degree as a Web Design and Administration including CIS-504.

PEC Coaching/Officiating

PEC-101 Introduction To Coaching

Lecture 3 Lab 0 Credit 3
Introduction to Coaching consists of a four-part course that includes coaching theory, sports medicine, sports psychology, and sports physiology. It leads to coaching authorization for the State of Iowa as a

junior high or senior high coach.

PEC-116 Athletic Development And Human Growth

Lecture 2 Lab 0 Credit 2
A study of the physical, cognitive, and psychosocial stages of development during middle childhood and adolescence and how these stages impact the coaching profession. This is one of the four courses leading to the coaching and authorization issued by the Iowa Department of Education as a head coach or assistant coach of any interscholastic athletic activity.

PEC-120 Body Structure And Function

Lecture 2 Lab 0 Credit 2
An introduction to the physiological processes and anatomical features of the human body which are related to and affected by physical activity and training. This is one of the four courses leading to the coaching and authorization issued by the Iowa Department of Education as a head coach or assistant coach of any interscholastic athletic activity.

PEC-148 Theory Of Coaching Basketball

Lecture 2 Lab 0 Credit 2
A study of the methods and techniques of coaching basketball. Discussion of pre-season, in-season and post-season program; practice organization; scouting; and game preparation.

PEC-185 Sports Officiating, Basketball, Volleyball

Lecture 2 Lab 0 Credit 2
An integration of rules, knowledge and floor responsibilities through actual participation in basketball and volleyball officiating. Students are required to provide designated equipment for officiating purposes.

PEH General Physical Ed and Health

PEH-102 Health

Lecture 3 Lab 0 Credit 3
A survey of individual problems and community health problems. Aspects of mental illnesses; communicable, infectious, congenital, degenerative and vitamin deficiency diseases; hormone imbalance and harmful effects of narcotic drugs and alcohol are stressed. Measures involving the preventing, controlling and promoting of better mental health and physical health in general are emphasized. Designed to stimulate the formation of desirable attitudes toward the health of the individual and the community.

PEH-161 Introduction To Physical Education

Lecture 2 Lab 0 Credit 2
Orientation and exploration in the physical education field, career opportunities, responsibilities to the profession, ethical sports practices, historical background and social forces that act upon organized as well as informal sports.

PEH-169 Principles Of Weight Training

Lecture 0 Lab 4 Credit 2
Principles of Weight Training identifies the anatomical and physiological process of muscle development and the effects of weight training on those processes. It focuses on the basic principles of weight training and the mastery of techniques which apply to professional development and to coaching applications.

PET Physical Education Training

PET-105 Basic Athletic Training

Lecture 3 Lab 0 Credit 3
This course serves as an introduction to the profession of athletic training. Students will be instructed in basic skills and theories of the profession including: measurement of vital signs, taping, wrapping, and immobilization. Students will become familiar with the roles, functions, and professional preparation of an athletic trainer as well as the history of the profession and its governing structures.

PET-140 Athletic Training Practicum I

Lecture 0 Lab 2 Credit 1
Athletic training skills instruction for the beginning student athletic trainer. Practical examinations cover material taught during scheduled meeting times and observation hours. Observation of athletic training skills and techniques used concurrent with athletic events. The purpose of this class is to provide students with clinical rotations during their freshman year. The rotation will be at multiple sites and sports with supervision from the Certified Athletic Trainer. Students will be expected to attend practices and games as assigned. At this time they will practice and demonstrate skills taught in the classroom. They will be in charge of a daily journal of activities and hours. Prerequisite: PET-105.

PET-230 Care And Prevention Of Athletic Injuries

Lecture 2 Lab 2 Credit 3
This course will introduce the student to athletic injuries, assessment, and treatment.

This course includes laboratory instruction in athletic taping and basic athletic training skills. The course also involves a directed observation requirement. Prerequisite: PET-109.

PEV Intercollegiate Physical Education

PEV-115 Varsity Baseball

Lecture 0 Lab 0 Credit 1

A course designed to give credit for knowledge and skills gained through varsity sports participation. Maximum of 4 semester hours may be earned.

PEV-121 Varsity Basketball, Men

Lecture 0 Lab 0 Credit 1

A course designed to give credit for knowledge and skills gained through varsity sports participation. Maximum of 4 semester hours may be earned.

PEV-122 Varsity Basketball, Women

Lecture 0 Lab 0 Credit 1

A course designed to give credit for knowledge and skills gained through varsity sports participation. Maximum of 4 semester hours may be earned.

PEV-140 Varsity Golf

Lecture 0 Lab 0 Credit 1

A course designed to give credit for knowledge and skills gained through varsity sports participation. Maximum of 4 semester hours may be earned.

PEV-145 Sports Shooting

Lecture 0 Lab 2 Credit 1

This course provides credit for PEV varsity sports earned by participating 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/or weight training. This course is a one credit course and can be repeated for a maximum of four credits. A criminal background check is required.

PEV-160 Varsity Softball

Lecture 0 Lab 0 Credit 1

A course designed to give credit for knowledge and skills gained through varsity sports participation. Maximum of 4 semester hours may be earned.

PEV-170 Varsity Volleyball

Lecture 0 Lab 0 Credit 1

A course designed to give credit for knowledge and skills gained through varsity sports participation. Maximum

of 4 semester hours may be earned.

PEV-190 Varsity Spirit Squad

Lecture 0 Lab 0 Credit 1

A course designed to give credit for knowledge and skills gained through varsity cheerleading participation. Maximum of 4 semester hours may be earned.

PEV-195 Sports Management

Lecture 0 Lab 4 Credit 1

This course is designed to provide practical experience in various operations of an athletic program. Topics to be covered include, but may not be limited to: event and facility management, promotions and marketing, eligibility and compliance, budgeting, and public relations. Maximum of 2 semester hours may be earned. Prerequisite: permission of instructor.

PHI Philosophy

PHI-101 Introduction To Philosophy

Lecture 3 Lab 0 Credit 3

A topical introduction to the major areas of philosophical inquiry.

PHI-105 Introduction To Ethics

Lecture 3 Lab 0 Credit 3

A survey of the major ethical emphases from ancient to modern times with pertinent reading in the works of representative philosophers.

PHI-122 Philosophy Of Contemporary Issues

Lecture 3 Lab 0 Credit 3

An introductory course treating the philosophical nature of contemporary social, moral, legal, political, and religious issues and problems. Examples of such issues and problems would be abortion, capital punishment, euthanasia, war, terrorism, justice, discrimination and sexual morality.

PHI-142 Ethics In Business

Lecture 3 Lab 3 Credit 4.5

Addresses moral issues that confront the contemporary business community. Traditional ethical systems provide a framework with which to analyze issues in areas of corporate responsibility and the rights and obligations of employers and employees.

PHS Physical Science

PHS-120 Exploring Physical Science

Lecture 3 Lab 2 Credit 4

This is combined lecture and lab course where lab/lecture are directly integrated. Topics covered come from physics, astronomy, chemistry, geology, and meteorology. Course intended for non-science majors. Prospective elementary and middle school teachers may find this course especially helpful. MAT-062 or High School Algebra recommended.

PHS-151 Introduction To Astronomy

Lecture 2 Lab 2 Credit 3

A survey of astronomy including historical considerations, the solar system, the universe and several topics. Topics may include the laws, the methods, and current research. Each planet will be studied as well as major stars and galaxies. Special topics include: cosmology, cosmogony, nova, pulsars, quasars, relativity, space travel, black holes, and other space mysteries. Lab to include: experiments, observations, slides and movies.

PHS-165 Introduction To Meteorology

Lecture 3 Lab 0 Credit 3

Introduction to atmospheric sciences and meteorology. Includes physical elements and process of weather, climatic types and regions, forecasting and associated activity.

PHS-185 Introduction To Earth Science

Lecture 3 Lab 0 Credit 3

An introduction to geologic processes that have generated and continue to alter the surface of the earth. Covers: major types of rocks and the rock cycle; rock deformation, weathering, transport and deposition by fluid agents; plate tectonics, volcanoes, earthquakes, orogeny; absolute and relative time and the geologic column. Includes segment on the history of geology.

PHY Physics

PHY-106 Survey Of Physics

Lecture 3 Lab 2 Credit 4

This class is designed as an introduction to the basic concepts of physics. Measurement, the scientific method, motion, forces, work and energy, simple machines, temperature and heat plus electricity and magnetism will be covered. Lab will be an integral part with activities augmenting the lecture concepts.

PHY-160 General Physics I

Lecture 4 Lab 2 Credit 5

This course is designed to provide a working knowledge of physics for those who need physics but do not need the rigor of a calculus-based physics course. The topics covered will include motion, force, energy, work, power, torque, linear momentum, rotational motion, angular momentum and selected topics from thermodynamics. The conservation laws will be stressed. Topics in modern physics are covered as time permits. Solving practical problems will be a major emphasis. Prerequisite: Student must be familiar with algebra and simple trigonometry.

PHY-161 General Physics II

Lecture 4 Lab 2 Credit 5

This course is a continuation of General Physics I. The major topics to be covered will include selected topics from thermodynamics, vibrations, wave motion, electricity, and magnetism. Topics in modern physics are covered as time permits. Solving practical problems will be a major emphasis. Prerequisite: PHY-160.

PHY-212 Classical Physics I

Lecture 4 Lab 2 Credit 5

College Physics introduces the students to the classical topics of motion in one, two and three dimensions (Kinematics and dynamics), gravitation, work and energy, relativistic dynamics, rotational and oscillatory motion and thermodynamics. This physics course depends very much on the calculus of reals and vector integral calculus. Pre or Corequisite: MAT-210.

PHY-222 Classical Physics II

Lecture 4 Lab 2 Credit 5

College Physics continues in the second semester with emphasis on the theory of electricity and magnetism. The concept of a field is applied to the electrostatic charge. The laws of Coulomb and Gauss are to be developed and applied to various types of charge distribution. Electric current and magnetic force are to be discussed in connection with their application to electromagnetic induction. Prerequisite: PHY-212.

PNN Practical Nursing

PNN-160 Introduction To Nursing Practice

Lecture 2 Lab 0 Credit 2

This course provides the student with an introduction to nursing concepts and principles. From a historical perspective, the student will explore the roles and challenges of the nurse in the health care continuum. The curriculum strand of the nursing process is introduced and serves as the foundation for the development of critical thinking skills. Other curriculum strands introduced include communication, stress and adaptation, wellness, professional accountability, information technology, time management and priority setting. Prerequisite: Certification in Iowa CNA 75 Clock Hours. Corequisite: PNN-220.

PNN-220 Pharmacology For Nursing I

Lecture 2 Lab 0 Credit 2

This course introduces the student to the basics of pharmacology. Principles of drug administration, including dosage calculation and routes and techniques of administration are presented. Legal/ethical considerations, as related to drug therapy, are discussed. An overview of drug classifications, drug actions, common adverse reactions, and nursing interventions are included. Emphasis is placed on nursing responsibilities in drug therapy, including safe administration of all drugs. Corequisite: PNN-160.

PNN-311 Pn Issues And Trends

Lecture 1 Lab 0 Credit 1

This course is an overview of the role of the licensed practical nurse. Ethical and legal responsibilities of the nurse are identified. Levels of practice, licensure, career opportunities, and job-seeking skills are addressed. Opportunities for professional growth are explored. Prerequisite: PNN-534. Corequisite: BIO-186.

PNN-534 Medical-Surgical Nursing I

Lecture 8 Lab 13 Credit 12.5

This course builds on concepts and strands previously presented in the curriculum. A systematic approach is utilized in providing nursing care to individuals across the lifespan (pediatrics, adult and geriatrics). The course emphasizes selected common and chronic alterations in health. The curriculum strands which are introduced include psychosocial, cultural and spiritual concepts, nutrition, and safety and infection control. An opportunity is provided for students to apply theoretical knowledge, to utilize the nursing process, and to practice nursing

techniques in clinical settings. Prerequisites: PNN-160, PNN-220 and BIO-177.

PNN-535 Medical-Surgical Nursing II

Lecture 8 Lab 12 Credit 12

This course continues to incorporate concepts and strands previously presented in the curriculum. A systematic approach is utilized in providing nursing care to individuals and families across the lifespan (pediatrics, adult and geriatrics). This course emphasizes selected common and chronic alterations in health and includes essential content related to maternity care. An opportunity is provided for students to apply theoretical knowledge, to utilize the nursing process, and to practice nursing techniques in clinical settings. Prerequisite: PNN-534. Corequisite: PNN-311.

POL Political Science

POL-110 Introduction To Political Science

Lecture 3 Lab 0 Credit 3

An introduction to the field of political science by illustrating the kind of contemporary issues political scientists deal with, the diversity of approaches they make and the significant results they hope to achieve. It will also acquaint students with the complex and vitally important subject of contemporary government and politics.

POL-111 American National Government

Lecture 3 Lab 0 Credit 3

A survey of the American federal system of government which includes a description and analysis of interest groups, political parties, public opinion, the presidency, the Congress, the court system and foreign policy making.

POL-112 American State And Local Government

Lecture 3 Lab 0 Credit 3

A survey of state and local government in the United States which includes an analysis of state constitutions, state and local legislative, executive and judicial systems, rural and urban problems and their possible political solutions.

PSY Psychology

PSY-102 Human And Work Relations

Lecture 3 Lab 0 Credit 3

This is a course that includes the understanding of the applications of psychological principles, theory, and research related to the work setting.

PSY-111 Introduction To Psychology

Lecture 3 Lab 0 Credit 3

A basic course in the understanding of behavior, designed to give the student a scientific background in the fundamental problems and techniques covered in the field of psychology.

PSY-121 Developmental Psychology

Lecture 3 Lab 0 Credit 3

A systematic study of life-span development. Individual differences in behavior as well as cultural norms are considered in relation to heredity and environment.

PSY-211 Psychology Of Adjustment

Lecture 3 Lab 0 Credit 3

A study of the adjusting/coping behavior of the individual in various aspects of life situations. Prerequisite: PSY-111.

PSY-226 Psychology Of Aging

Lecture 3 Lab 0 Credit 3

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.

PSY-228 Death And Dying

Lecture 3 Lab 0 Credit 3

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. Exploration of one's own views and attitudes concerning death and dying will be encouraged. In addition, opportunities to visit death-related

industries such as funeral homes and cemeteries and to interact with professionals in the field such as hospice workers, grief counselors, and funeral directors will be provided.

PSY-241 Abnormal Psychology

Lecture 3 Lab 0 Credit 3

A survey of the history of mental illness including a study of normal and abnormal behavior as related to various cultures. Personality development, individual adjustment, and description of the various clinical entities and their relevance to present day life will be covered. Character disorders and personality structures which cause maladjustment are reviewed. A review of the theories of personality is included. Prerequisite: PSY-111.

PSY-251 Social Psychology

Lecture 3 Lab 0 Credit 3

The study of interpersonal relations, social attitudes, group dynamics, intergroup relations, class and cultural influence in a psychological context. Prerequisite: PSY-111.

RCP Respiratory Care

RCP-230 Introduction To Respiratory Care

Lecture 3 Lab 4 Credit 5

This course is an introduction to Respiratory Care, including basic equipment and therapeutic modalities for entry-level practice. Emphasis will be placed on preparing the student for patient encounters and the skills needed to provide competent entry-level care in the clinical setting. Prerequisite: Admission to program.

RCP-330 Respiratory Care II

Lecture 4 Lab 2 Credit 5

This course is a continuation of RCP-230 and will build on the equipment and therapeutic modalities essential to clinical practice. Major topics include electrocardiograms, airway management and airway clearance techniques, arterial blood gases, assessment of respiratory failure and methods of non-invasive ventilation. Prerequisites: RCP-230, BIO-163. Corequisites: RCP-350, RCP-751.

RCP-350 Pulmonary Pathology

Lecture 3 Lab 0 Credit 3

This course presents an overview of acute and chronic diseases affecting the pulmonary system. Diagnosis, assessment, treatment and management of the disease will be discussed. Prerequisite: RCP-230. Corequisites: RCP-330, RCP-751.

RCP-440 Cardio/Pulmonary Diagnostics

Lecture 2 Lab 0 Credit 2

This course will present various cardiopulmonary diagnostic tests and the role of the respiratory care practitioner. Contents included: pulmonary function testing, cardiopulmonary exercise testing, specialized test regimens and quality assurance in the pulmonary function laboratory. Prerequisites: RCP-524, RCP-757. Corequisites: RCP-450, RCP-620, RCP-761.

RCP-450 Respiratory Care Iv

Lecture 2.5 Lab 1 Credit 3

This course will focus on advanced equipment and therapeutic modalities used in the practice of Respiratory Care. Major topics include ECGs, hemodynamic monitoring, cardiac pharmacology, polysomnography and pulmonary rehabilitation. Prerequisite: RCP-524. Corequisites: RCP-440 and RCP-620.

RCP-470 Cardiac Monitoring

Lecture 1.5 Lab 0 Credit 1.5

Surveys the theory and application of specialized diagnostic procedures, equipment and monitoring techniques in cardiac medicine. Includes ECG and monitoring leads, basic interpretation dysrhythmia recognition and advanced cardiac life support (ACLS).

RCP-524 Respiratory Care III

Lecture 4.5 Lab 1 Credit 5

This course introduces the concepts of mechanical ventilation used in the respiratory support of the critically ill patient, with emphasis on indications for ventilation, parameters monitored during ventilation, function, and clinical applications. Prerequisite: RCP-330. Corequisite: RCP-757.

RCP-620 Neonatal/Pediatric Respiratory Care

Lecture 4 Lab 2 Credit 5

This course will cover the assessment of the newborn and pediatric patient. Fetal circulation, congenital anomalies, respiratory disorders of the newborn, ventilation of the newborn, surfactant replacement, oxygen and aerosol therapy of the newborn and pediatric patient, as well as child development will be discussed. Prerequisite: RCP-524, RCP-757. Corequisites: RCP-440, RCP-450, RCP-761.

RCP-751 Respiratory Care Clinic I

Lecture 0 Lab 15 Credit 5

Learners are assigned to various clinical experiences within the hospital and homecare settings in order to apply principles and skills learned in RCP-330. Prerequisite: Satisfactory

completion of RCP-230. Must be currently enrolled in or have satisfactorily passed RCP-330. Graded on a Pass/No Pass basis.

RCP-755 Respiratory Care Clinic II

Lecture 0 Lab 0 Credit 2

Learners are assigned to various clinical experiences within a health care setting to apply principles learned in the respiratory curriculum. Prerequisites: RCP-330, RCP-350 and RCP-751. Corequisites: RCP-524 and RCP-470.

RCP-761 Respiratory Care Clinic III

Lecture 0 Lab 15 Credit 5

Learners are assigned to various clinical experiences within a hospital and homecare setting to apply principles learned in the respiratory curriculum. Prerequisite: Satisfactory completion of RCP-524, RCP-757. Must be currently enrolled in or have satisfactorily passed RCP-450. Graded on Pass/No Pass basis.

RCP-767 Respiratory Care Clinic IV

Lecture 0 Lab 0 Credit 8

Learners are assigned to various clinical experiences within a health care setting to apply principles learned in the respiratory curriculum. Prerequisites: RCP-440, RCP-450 RCP-620 and RCP-761. Corequisites: RCP-910 and RCP-810.

RCP-810 Respiratory Care Professional

Lecture 2 Lab 0 Credit 2

The purpose of this course is to assist second year respiratory care students in preparing for autonomous professional practice. The Role of the Professional: duties to client, employer and public; professional responsibilities; involvement in continuing education and professional career development will be explored. Prerequisites: RCP-450, RCP-761. Corequisites: RCP-766 and RCP-880.

RCP-910 Respiratory Care Rrt Review

Lecture 2 Lab 0 Credit 2

This course is designed to test the student's ability to successfully earn passing scores on advanced-level examinations. Although advanced-level examinations will be the focus of this course, review of entry-level examination concepts will also be provided. Mock board examinations will be administered after completion of a comprehensive review seminar. Prerequisites: RCP-440, RCP-450, RCP-620 and RCP-761. Corequisites: RCP-810 and RCP-767.

RDG Reading

RDG-045 Keys To Reading

Lecture 2 Lab 2 Credit 3

A beginning course designed to build basic reading skills: identifying topics and main ideas, identifying supporting details, making inferences and recognizing patterns in paragraphs. A pretest will determine the student's appropriate level for vocabulary skill building, and students will work on vocabulary development at the appropriate level.

REL Religion

REL-101 Survey Of World Religions

Lecture 3 Lab 0 Credit 3

A survey of the major religions of the eastern and western world. Each religion is placed in its historical context, and its major tenets are explored. This course includes a general understanding of the various religions studied, some specific insights into each religion's belief structures and discussion of the general function of religion in human experience.

SCI Science

SCI-115 Basic Electricity

Lecture 1 Lab 2 Credit 2

An introduction to basic electricity and magnetism. A study of the relationship between voltage, current, and resistance. Power generation, power transfer and their applications. A basic understanding of the applied electrical circuits.

SCI-123 Forensic Science

Lecture 3 Lab 2 Credit 4

Explores forensic science and its impact on science, society and the criminal justice system. Focuses on basic concepts in selected areas of chemistry, biochemistry, cell and molecular biology, and anatomy and physiology. This course is designed to educate liberal arts students about basic sciences, and the realities and limitations of scientific methods when applied specifically to criminal investigation.

SCI-928 Independent Study

Lecture 0 Lab 0 Credit 3

Individual study in a science area determined by consultation between the student and the department instructional staff. Study to be based in interest of student and capabilities of college facilities. Prerequisite: 12 hours of science work.

SDV Student Development

SDV-125 Workplace Readiness

Lecture 1 Lab 0 Credit 1

This course is designed to assist students in obtaining and maintaining employment. Topics include making career decisions, using labor market information, developing a portfolio and demonstrating positive attitudes and behaviors in the workplace.

SDV-130 Career Exploration

Lecture 1 Lab 0 Credit 1

This course is designed for students in developing an awareness of and skillfulness in career development process emphasizing self-assessment, occupational exploration and job placement.

SDV-141 Launch: A College Success Seminar

Lecture 3 Lab 0 Credit 3

This seminar is designed to enhance students' academic success. It will guide first-time college students to develop and utilize skills essential for facing the challenges and academic rigor of college. Emphasis will be on learning strategies, classroom performance, and navigating the college culture. Prerequisite: First Semester only.

SDV-153 Pre Employment Strategies

Lecture 2 Lab 0 Credit 2

This course is designed to aid students in developing the materials and skills necessary to obtain and maintain employment. Topics include character development associated with job success, job seeking skills, the application & hiring process, communication, teamwork skills and leadership skills.

SMM Social Media and Marketing

SMM-108 Social Media Engagement

Lecture 2 Lab 2 Credit 3

This course explores the history of social networks and introduces students to social media for organizations. It provides students opportunities to implement the use of social media tools as part of a marketing strategy and work with social media analytic tools.

SMM-220 Navigating The Media Minefield

Lecture 3 Lab 0 Credit 3

This course explores the legal and regulatory issues surrounding social media platforms. Students will learn how to avoid common legal pitfalls and anticipate situations that may have potential legal consequences. Course

content includes defamation, privacy issues, copyright and trademark, commercial speech, cyberbullying, and free speech boundaries.

SOC Sociology

SOC-110 Intro To Sociology

Lecture 3 Lab 0 Credit 3

An analysis of social organization (or the social order). This course deals with the nature of sociology as a science, the original nature of man, the socialization of the individual, the development of groups and group behavior, the nature of culture and culture patterns, the organization of institutions, the nature of social order, the organization of human stratification and examination of major social processes. Special emphasis is placed upon the American cultural patterns.

SOC-114 Conflict Resolution In The Workplace

Lecture 3 Lab 0 Credit 3

This course will study conflict resolution theories and applications in the workplace. The course will provide students with the opportunity to develop their own effective interpersonal conflict resolution skills as well as skills needed to help employees resolve their conflicts with one another and the skills needed to negotiate contracts. Students will also be introduced to theories and skills needed to apply culturally sensitive principles to conflict resolution.

SOC-115 Social Problems

Lecture 3 Lab 0 Credit 3

An investigation into a selection of social problems involving alternative solutions. Topics may include drug and alcohol abuse, crime, violence, prejudice and discrimination, and human sexuality.

SOC-120 Marriage And Family

Lecture 3 Lab 0 Credit 3

A critical approach to the problems of the modern family with some information given to the historical perspective. Such topics as courtship and marriage, marital adjustment, the achievement of family unity, minority family types, parent-child relationships, economic and social changes in family organizations and family control will be covered.

SOC-136 Foundations Of Conflict Resolution

Lecture 3 Lab 0 Credit 3

This course is designed to study the theories of conflict and conflict transformation. The course will provide students with the opportunity to develop conflict resolution

skills as well as to examine their own comfort with conflict. The course will also introduce students to various forms of conflict resolution and transformation, including mediation, structured dialogue, circle processes, restorative justice and strategic peacebuilding.

SOC-160 Introduction To Social Work

Lecture 3 Lab 0 Credit 3

The 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 services 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.

SOC-161 Introduction To Social Work Lab

Lecture 0 Lab 4 Credit 1

Students will complete 72 hours of volunteer service in a social service setting. They will complete a paper analyzing the agency and evaluating their work in the agency. Corequisite: SOC-160.

SOC-230 Juvenile Delinquency

Lecture 3 Lab 0 Credit 3

A study of juvenile delinquency as an individual and social problem. This course includes theories of delinquency causations, law enforcement procedures, methods of corrections and prevention of juvenile delinquency.

SOC-240 Criminology

Lecture 3 Lab 0 Credit 3

A general survey of the history, nature and causes of crime, criminal investigation and prosecution, punishment, correctional treatment and crime prevention. Prerequisite: CRJ-100.

SOC-851 Study Abroad In Peace Studies

Lecture 3 Lab 0 Credit 3

This course examines the political, socioeconomic, and historical factors contributing to a culture of peace and nonviolence in Costa Rica as well as the contemporary challenges in maintaining that culture. Students will meet with decision makers and practitioners in the fields of government, business, education, religion, security, foreign policy, environment and the media. Basic language and cultural instruction will be included along with excursions to areas of interest in Costa Rica. Recommended preparatory classes: SOC-136, Foundations of Conflict Resolution and FLS-121, Conversational Spanish.

SPC Speech

SPC-101 Fundamentals Of Oral Communication

Lecture 3 Lab 0 Credit 3

Explores communication in a variety of contexts including interpersonal relationships, the workplace, small groups, and public speaking. Emphasis on the application and practice of communication theories and skills, particularly public speaking.

SPC-112 Public Speaking

Lecture 3 Lab 0 Credit 3

This course examines both the theoretical and practical basis of speech communication, particularly public speaking. Emphasis is on speech preparation, organization, support, delivery, and audience analysis. Required for A.A. and A.S. degrees.

SPC-115 Advanced Public Speaking

Lecture 3 Lab 0 Credit 3

A continuation of SPC-101 or SPC-112. This course presents advanced theories and techniques used in public speaking. After dinner speaking, persuasive presentations and campaigns, and lecture and training may be covered in this course. The course shall be designed, however, to meet the needs of the students. Prerequisite: SPC-101 or SPC-112.

SPC-120 Intercultural Communication

Lecture 3 Lab 0 Credit 3

Emphasizes communication theory across cultures. Focus is on identifying the cultural bases of beliefs, attitudes, values and behaviors. Interactive assignments are used for the purpose of recognizing commonalities across cultures, developing a more global multicultural perspective, identifying and appreciating other cultural orientations, and recognizing and assigning cultural explanations of specific behaviors. Prerequisites: SPC 112 or SPC 101.

WDV Web Development

WDV-101 Introduction To HTML & CSS

Lecture 2 Lab 2 Credit 3

Introduces current standards of HTML, XHTML and CSS. Students will code HTML and CSS web pages, test them in browser and publish them to a web server. Page layouts will use various CSS techniques. Tables and forms will be used as well. A current version of Dreamweaver will be used to build more complex pages."

WDV-120 Interface Design

Lecture 2 Lab 2 Credit 3

This course covers the design, prototyping, and evaluation of user interfaces to computers which is often called Human-Computer Interaction (HCI). Students will gain a strong understanding of user interface design. This covers references, user experience (UX), and usability principles. Topics include psychological and interaction principles, requirements analysis, designing for different screens (web, TVs and mobile devices), design standards, style guides, techniques and visual design principles. Prerequisite: GRA-175."

WDV-132 Mobile Application Development

Lecture 2 Lab 2 Credit 3

This course will introduce students to the skills required for building both web based and native mobile applications (apps). Students will explore when and why an app makes sense over a mobile web site and develop a range of small apps that take advantage of native device functionality. The differences between mobile OS will be explored along with the various distribution methods and publishing requirements currently available. Prerequisites: WDV-101 and CIS-125."

WDV-341 Intro Php

Lecture 2 Lab 2 Credit 3

This course will introduce PHP as a server side scripting language. It will introduce the MySQL database and the SQL language for use with PHP. Students will embed PHP and SQL code into html pages and publish them to a PHP enabled server. Students will create a web application that will allow for user login pages, as well as add, delete and updates of database content to web pages. Prerequisites: WDV-101, CIS-125 and CIS-332.

WEL Welding

WEL-111 Welding Blueprint Reading

Lecture 2 Lab 2 Credit 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. A thorough coverage of welding symbols is integrated within the course.

WEL-130 Oxyacetylene Welding

Lecture 1 Lab 2 Credit 2

To provide a thorough technical understanding of metallurgy, oxyacetylene welding, flame cutting and brazing fundamentals and to

develop skills necessary to produce high quality fillet and square groove welds in 3/16" plate and schedule 50 carbon steel pipe. Students develop understanding of weld hazards and safety procedures throughout the course.

WEL-160 Arc Welding I (SMAW)

Lecture 2 Lab 6 Credit 5

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 16 gauge to 1/4" mild steel in all positions.

WEL-164 Arc Welding II (SMAW)

Lecture 1 Lab 6 Credit 4

An advanced course designed to develop skills, integrity, and confidence necessary to pass skill 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. Prerequisite: WEL-160 or equivalent.

WEL-172 Advanced Shielded Metal Arc Welding II

Lecture 1 Lab 6 Credit 4

Provides understanding and skill development necessary to produce high quality welds on 3/8" to 1" mild steel in all positions. Includes information relating to air-arc cutting and gouging, procedures and welder qualifications, testing of welds and metals identification. Prerequisite: WEL-160 or equivalent.

WEL-182 FCAW

Lecture 1 Lab 2 Credit 2

Provides thorough technical understanding of the flux cored arc welding process including adjustment and operation of power source, types of arc shielding, and safe operating procedure. Quality welds are produced on 3/8" to 1" carbon steel in all positions. Prerequisite: WEL-186.

WEL-186 GMAW

Lecture 2 Lab 4 Credit 4

Provides a technical understanding of the gas metal arc welding process, power sources and adjustment, metal transfer, shielding gases and weld safety. Develops skills necessary to produce high quality welds of 1/16" at 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 requirements.

WEL-192 Gas Tungsten Arc Welding

Lecture 2 Lab 4 Credit 4

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. Prerequisite: completion of WEL-131 or equivalent.

WEL-197 Gas Tungsten Arc Welding - Tube

Lecture 1 Lab 4 Credit 3

Develops skills necessary for making high quality all position welds on schedule 10 to schedule 40 carbon steel pipe; preparation and testing of pipe is included. Prerequisite: WEL-192.

WEL-198 Advanced Gas Metal Arc Welding - Aluminum

Lecture 1 Lab 2 Credit 2

An advanced gas metal arc welding course designed for the student who wishes to develop skills necessary to weld 0.050" to 0.250" aluminum in all positions. Prerequisite: WEL-186 or equivalent.

WEL-235 Layout & Fabrication

Lecture 0 Lab 8 Credit 4

Teaches layout & fitting skills applicable to an industrial welding shop, including reading prints, estimating & ordering materials, performing layout & cutting work, and welding procedures applicable to fabricating a finished product. Emphasizes problem solving & cooperation within an industrial-like environment. Safety, accuracy and a commitment to excellence is emphasized. Prerequisite: Completion of first 3 semesters of welding program curriculum or approval of instructor.

WEL-292 Pipe Welding/Smaw - Uphill

Lecture 1 Lab 6 Credit 4

Provides thorough technical understanding of uphill pipe welding procedures and application. Students produce welds using schedule 40 and 60 carbon steel pipe in 1G, 2G, 4G and 6G positions with a degree of skill necessary to meet American Society of Mechanical Engineer's code requirements. Prerequisites: WEL-160 and WEL-172 or successfully passing vertical and overhead guided bend-test on single vee open butt weld on 3/8" carbon steel according to American Welding Society code requirements.

**WEL-720 Introduction To Robotic Arc
Welding**

Lecture 1 Lab 2 Credit 2

This course is an overview of robots used in the welding industry. Basic mechanisms, hydraulics, and pneumatics are covered. Students receive hands-on experience in programming a robot to weld fixture parts using the GMAW process. Prerequisite: WEL-186.



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