# Table of Contents

- Admissions Information ................................................................. 3
- Application Procedures - Credit Courses ...................................... 4
- Graduation Requirements for Associate of Arts Degree .............. 6
- Graduation Requirements for Associate of Science Degree ............ 8
- Accounting - Diploma and AAS ..................................................... 10
- Administrative Professional - AAS ................................................. 12
- Administrative Legal Professional - AAS ....................................... 13
- Advanced Automation and Robotics Technology ......................... 14
- Advanced Manufacturing Technology - AAS .......................... 15
- Animation for Television, Film, and New Media - AAS ............. 16
- Automotive Technology - Diploma and AAS ............................ 17
- Automotive Technology - Management Option - AAS ............. 18
- Biomedical Electronics Technician - AAS .................................... 19
- Business Administration - AAS .................................................... 20
- Collision Repair and Restoration - Diploma and AAS ............... 21
- Computer Aided Design Technology - AAS .................. 22
- Construction Technology - Carpentry Emphasis - AAS, Diploma and Certificate .................................................. 23
- Construction Technology - Management AAS .......................... 24
- Electronics Technology - Diploma .......................................... 25
- Electronics Technology - AAS ................................................... 26
- Emergency Medical Services - AAS ........................................... 27
- Entrepreneurship ................................................................. 28
- Industrial Maintenance Technology ........................................... 29
- Interactive & Social Media Marketing - AAS ............................. 30
- Medical Assistant - Diploma .................................................... 31
- Medical Coding and Billing - Provider Emphasis ..................... 32
- Medical Scribe-Certificate ...................................................... 33
- Modern Food Production, Agriculture and the Environment - AAS, Diploma and Certificate .................................................. 34
- Network Administration and Cyber Security ............................ 36
- Nursing - Practical Nursing and Associate Nursing Degree ................................. 37
- Nurse Aide ........................................................................... 39
- Occupational Therapy Assistant - AAS ..................................... 40
- Pharmacy Technician-Diploma .............................................. 41
- Respiratory Care ..................................................................... 42
- Information Technology - Web Design & Development - Diploma and AAS .................................................. 44
- Welding - AAS, Diploma and Certificates ................................... 45
- Placement Charts .................................................................. 46
- Course Descriptions .............................................................. 48

---

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

--

www.sciowa.edu (319) 208-5000
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.).

Individuals having questions or complaints related to compliance with this policy should contact Tina Young, Title IX / Equity Coordinator, Southeastern Community College, 1500 W. Agency Road, West Burlington, IA 52655, email tyoung@scsciowa.edu, 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.

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. Southeastern offers reasonable accommodations to encourage and ensure that persons with disabilities have equal access to education. Through disability services, accommodations are made available to qualified students with a documented disability. It is the recommendation of the Disability Services Coordinator that students contact the office as soon as possible to self-identify early so that they can work together to determine eligibility, identify issues and get reasonable accommodations in place. Each individual’s needs and abilities are evaluated in accordance with ADA. To be eligible the student can forward the Disability Student Intake application and documentation of his/her disability to the Disability Services Coordinator. This information can be obtained from the Disability Services Coordinator and/or from the Disability Services Manual that is located at the webpage www.scciowa.edu/academics/disserv.asp. The Student Intake Application is on pages 25-27 and the Medical Professional Guidelines for Verifying a Disability are on page 31-33. You can self-report at any time to the Disability Services Coordinator, but it is strongly encouraged that you have everything that you need in place and ready when you begin classes at the start of each semester. For further information or to arrange for accommodations, call 319-208-5167.

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, or ACT and 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, West Burlington (319) 752-2731 x5017, admoff@scsciowa.edu/Keokuk (319) 524-3221 x1929, sadmoff@scsciowa.edu

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

We're glad you're interested in applying to SCC. Complete this checklist and you'll be a Blackhawk in no time!

Specific Procedures for Students Applying for Admission
Applications for Admission are accepted at any time and may be submitted online at www.scciowa.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 and ACT or e-Write score (within the last two years) report on file with the Enrollment Services Office. The Accuplacer, Aleks, ACT, 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 at 319-752-2731 x5022 (registrar@scciowa.edu) 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, or TOEFL 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 non-immigrant 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 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 ESL. For more information, please contact the Enrollment Services Office at (319) 752-2731, x5017.

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 at either West Burlington (319) 752-2731 x5017, admoff@scciowa.edu or Keokuk (319) 524-3221 x1929, admoff@scciowa.edu to determine the transfer of coursework.
since many majors require specific classes. Students may also be referred to faculty for questions regarding specific majors.

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/academics/transfer.
Graduation Requirements for Associate of Arts Degree

To graduate with an Associate of Arts degree, students must have a 2.00 grade point average or above and have successfully completed sixty (60) semester hours of credit in courses as designated below. In addition, students must meet the requirements specified in the following categories:

**THE COLLEGE EXPERIENCE**

*The College Experience: SDV-108*  1

**COMMUNICATIONS**

*COMPOSITION: ENG-105, 106*  6

*SPEECH: SPC-112 or 101*  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*

*Journalism: JOU-120, 121*

*Literature: LIT-101, 105, 120, 121, 122, 125, 131, 150, 151, 184, 204, 209*

*Mass Media Studies: MMS-111*


*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*

MATH & SCIENCE - Must include one math and one laboratory science course


NON-LAB SCIENCE: BIO-151, 277/PHS-165, 185/ SCI-922, 928

CULTURAL AWARENESS - Minimum of 3 hours


ELECTIVES

Once category requirements are met, any course from the above discipline areas may be applied to elective credits. 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
Graduation Requirements for Associate of Science Degree

To graduate with an Associate of Science degree, students must have a 2.00 grade point average or above and have successfully completed sixty (60) semester hours of credit in courses as designated below. In addition, students must meet the requirements specified in the following categories:

### Required Credit Hours

<table>
<thead>
<tr>
<th>Category</th>
<th>Required Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THE COLLEGE EXPERIENCE</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>COMMUNICATIONS</strong></td>
<td></td>
</tr>
<tr>
<td>COMPOSITION: <strong>ENG</strong>-105, 106</td>
<td>6</td>
</tr>
<tr>
<td>SPEECH: <strong>SPC</strong>-112 or 101</td>
<td>3</td>
</tr>
<tr>
<td><strong>HUMANITIES</strong> - Select from at least 2 different departments</td>
<td>6</td>
</tr>
<tr>
<td>ART: <strong>ART</strong>-101, 109, 120, 123, 133, 134, 138, 143, 144, 154, 157, 173, 174, 184, 203, 204, 208, 922, 928</td>
<td></td>
</tr>
<tr>
<td>DRAMA: <strong>DRA</strong>-101, 110, 130, 141, 142, 145, 165</td>
<td></td>
</tr>
<tr>
<td>ENGLISH: <strong>ENG</strong>-221, 929</td>
<td></td>
</tr>
<tr>
<td>HISTORY &amp; WORLD CIV: <strong>HIS</strong>-131, 132, 151, 152, 211, 231, 251, 257, 266, 268, 271</td>
<td></td>
</tr>
<tr>
<td><strong>HUMANITIES</strong>: <strong>HUM</strong>-114, 145, 287</td>
<td></td>
</tr>
<tr>
<td>JOURNALISM: <strong>JOU</strong>-120, 121</td>
<td></td>
</tr>
<tr>
<td>LITERATURE: <strong>LIT</strong>-101, 105, 120, 121, 122, 125, 131, 150, 151, 184, 204, 209</td>
<td></td>
</tr>
<tr>
<td><strong>MASS MEDIA STUDIES</strong>: <strong>MMS</strong>-111</td>
<td></td>
</tr>
<tr>
<td><strong>MUSIC</strong>: <strong>MUA</strong>-101, 104, 106, 108, 109, 120 through 127, 143, 146, 170, 173, 180, 183/ <strong>MUS</strong>-100, 102, 120, 121, 135, 136, 140, 150, 162, 204, 220, 221, 235, 236</td>
<td></td>
</tr>
<tr>
<td><strong>PHILOSOPHY</strong>: <strong>PHI</strong>-101, 105, 110, 122</td>
<td></td>
</tr>
<tr>
<td><strong>RELIGION</strong>: <strong>REL</strong>-101</td>
<td></td>
</tr>
<tr>
<td><strong>SPANISH</strong>: <strong>FLS</strong>-129, 141, 142, 231, 232, 922</td>
<td></td>
</tr>
<tr>
<td><strong>SPEECH</strong>: <strong>SPC</strong>-115</td>
<td></td>
</tr>
<tr>
<td><strong>SOCIAL SCIENCE</strong> - Select from at least 2 different departments</td>
<td>6</td>
</tr>
<tr>
<td><strong>ECONOMICS</strong>: <strong>ECN</strong>-120, 130</td>
<td></td>
</tr>
<tr>
<td><strong>GEOGRAPHY</strong>: <strong>GEO</strong>-121, 141, 161, 922</td>
<td></td>
</tr>
<tr>
<td>HISTORY &amp; WORLD CIV: <strong>HIS</strong>-131, 132, 151, 152, 211, 231, 251, 257, 266, 268, 271</td>
<td></td>
</tr>
<tr>
<td><strong>POLITICAL SCIENCE</strong>: <strong>POL</strong>-110, 111, 112</td>
<td></td>
</tr>
<tr>
<td><strong>PSYCHOLOGY</strong>: <strong>PSY</strong>-102, 111, 121, 211, 226, 227, 228, 241, 251</td>
<td></td>
</tr>
</tbody>
</table>

**MATH & SCIENCE** - Must include one math and one science course

**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


**ELECTIVES**

Once category requirements are met, any course from the above discipline areas may be applied toward elective credits. 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
Accounting - Diploma and AAS

This program is offered in West Burlington, Keokuk and Online. Keokuk students will be required to enroll in courses at either the West Burlington campus or online or both to complete this program.

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.

Students must take two courses from the Fall I elective group.

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

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Credit</th>
<th>Fall Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC-161 PAYROLL ACCOUNTING</td>
<td>3</td>
<td>ACC-332 COMPUTER ACCOUNTING - QUICKBOOKS</td>
<td>2</td>
</tr>
<tr>
<td>ACC-311 COMPUTER ACCOUNTING</td>
<td>3</td>
<td>BUS-185 BUSINESS LAW I</td>
<td>3</td>
</tr>
<tr>
<td>CSC-110 INTRODUCTION TO COMPUTERS</td>
<td>3</td>
<td>MAT-156 STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>ACC-111 INTRODUCTION TO ACCOUNTING</td>
<td>3</td>
<td>ECN-120 PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ADM-133 BUSINESS MATH AND CALCULATORS</td>
<td>3</td>
<td>ECN-130 PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>BUS-102 INTRODUCTION TO BUSINESS</td>
<td>3</td>
<td>PSY-111 INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>BUS-121 BUSINESS COMMUNICATIONS</td>
<td>3</td>
<td>SOC-110 INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>BUS-186 BUSINESS LAW II</td>
<td>3</td>
<td>ACC-146 MANAGERIAL ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>ECN-120 PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
<td>ACC-232 INTERMEDIATE ACCOUNTING II</td>
<td>4</td>
</tr>
<tr>
<td>ECN-130 PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
<td>BUS-180 BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105 COMPOSITION I</td>
<td>3</td>
<td>BUS-936 BUSINESS CAPSTONE</td>
<td>1</td>
</tr>
<tr>
<td>ENG-106 COMPOSITION II</td>
<td>3</td>
<td>ENG-105 COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>ENG-131 BUSINESS ENGLISH</td>
<td>3</td>
<td>ENG-106 COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>FIN-130 PRINCIPLES OF FINANCE (ONLINE ONLY)</td>
<td>3</td>
<td>ENG-131 BUSINESS ENGLISH</td>
<td>3</td>
</tr>
<tr>
<td>HUM-287 LEADERSHIP DEVELOPMENT STUDIES</td>
<td>3</td>
<td>SPC-101 FUNDAMENTALS OF ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>MAT-140 FINITE MATH</td>
<td>3</td>
<td>SPC-112 PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td>MAT-165 BUSINESS CALCULUS</td>
<td>3</td>
<td>ACC-932 INTERNSHIP</td>
<td>4</td>
</tr>
<tr>
<td>MGT-101 PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
<td>ADM-133 BUSINESS MATH AND CALCULATORS</td>
<td>3</td>
</tr>
<tr>
<td>MGT-170 HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
<td>BUS-102 INTRODUCTION TO BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>MKT-110 PRINCIPLES OF MARKETING</td>
<td>3</td>
<td>BUS-121 BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111 INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
<td>BUS-186 BUSINESS LAW II</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110 INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
<td>ECN-120 PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110 INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
<td>ECN-130 PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester I</td>
<td>Credit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC-142 FINANCIAL ACCOUNTING</td>
<td>3</td>
<td>ENG-105 COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>ACC-261 INCOME TAX ACCOUNTING</td>
<td>3</td>
<td>ENG-106 COMPOSITION II</td>
<td>3</td>
</tr>
<tr>
<td>BCA-157 INTERMEDIATE SPREADSHEETS</td>
<td>3</td>
<td>ENG-131 BUSINESS ENGLISH</td>
<td>3</td>
</tr>
<tr>
<td>ECN-120 PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
<td>FIN-130 PRINCIPLES OF FINANCE (ONLINE ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>ECN-130 PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
<td>HUM-287 LEADERSHIP DEVELOPMENT STUDIES</td>
<td>3</td>
</tr>
<tr>
<td>MAT-140 FINITE MATH</td>
<td>3</td>
<td>MAT-140 FINITE MATH</td>
<td>3</td>
</tr>
<tr>
<td>MAT-165 BUSINESS CALCULUS</td>
<td>3</td>
<td>MAT-165 BUSINESS CALCULUS</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111 INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
<td>MGT-101 PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110 INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
<td>MGT-170 HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105 COMPOSITION I</td>
<td>3</td>
<td>MKT-110 PRINCIPLES OF MARKETING</td>
<td>3</td>
</tr>
<tr>
<td>ENG-106 COMPOSITION II</td>
<td>3</td>
<td>PSY-111 INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ENG-131 BUSINESS ENGLISH</td>
<td>3</td>
<td>SOC-110 INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SPC-101 FUNDAMENTALS OF ORAL COMMUNICATION</td>
<td>3</td>
<td>SPC-101 FUNDAMENTALS OF ORAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>SPC-112 PUBLIC SPEAKING</td>
<td>3</td>
<td>SPC-112 PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td>Fall Semester II</td>
<td>Credit</td>
<td>Program Total</td>
<td>62-63</td>
</tr>
<tr>
<td>ACC-231 INTERMEDIATE ACCOUNTING I</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Where will this take me?

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

Instructor and Staff

Kevin Rosenberg
Professor
(319) 208-5000 ext. 5199
krosenberg@scciowa.edu
BBA, University of Iowa
MA, University of Iowa

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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 Professional - AAS

Students who desire a lighter academic load or who need preparatory work in English, mathematics or keyboarding may want to consider one or two semesters of preparatory work prior to entering the associate of applied science program. Prospective or incoming students must be tested for placement before registering for Administrative Professional classes.

West Burlington campus and/or online (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester I</td>
<td>ADM-117 KEYBOARDING AND DOCUMENT PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADM-162 OFFICE PROCEDURES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSC-110 INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG-131 BUSINESS ENGLISH</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC-111 INTRODUCTION TO ACCOUNTING or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ACC-131 PRINCIPLES OF ACCOUNTING I</td>
<td>4</td>
</tr>
<tr>
<td>Spring Semester I</td>
<td>ADM-120 ADVANCED DOCUMENT PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADM-171 RECORDS MANAGEMENT</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BUS-121 BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIO-105 INTRODUCTORY BIOLOGY or</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MAT-110 MATH FOR LIBERAL ARTS or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT-702 INTRODUCTION TO MATH APPLICATIONS or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT-772 APPLIED MATH (ONLINE ONLY) or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHS-151 INTRODUCTION TO ASTRONOMY or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHS-165 INTRODUCTION TO METEOROLOGY or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PHS-185 INTRODUCTION TO EARTH SCIENCE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPC-101 FUNDAMENTALS OF ORAL COMMUNICATION or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPC-112 PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS-102 INTRODUCTION TO BUSINESS or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS-185 BUSINESS LAW I or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FIN-121 PERSONAL FINANCE (ONLINE ONLY) or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MGT-130 PRINCIPLES OF SUPERVISION or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MGT-170 HUMAN RESOURCES MANAGEMENT or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKT-110 PRINCIPLES OF MARKETING or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKT-160 PRINCIPLES OF RETAILING or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SMM-108 SOCIAL MEDIA ENGAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>Fall Semester II</td>
<td>ACC-332 COMPUTER ACCOUNTING - QUICKBOOKS</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>ADM-133 BUSINESS MATH AND CALCULATORS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADM-149 TRANSCRIPTION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ADM-230 INTEGRATED OFFICE PROJECTS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS-180 BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MGT-101 PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester II</td>
<td>ADM-235 ADVANCED INTEGRATED OFFICE PROJECTS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BUS-290 EMPLOYMENT SEARCH/WORKPLACE SUCCESS</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>BUS-932 BUSINESS INTERNSHIP</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PSY-102 HUMAN AND WORK RELATIONS or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PSY-111 INTRODUCTION TO PSYCHOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC-110 INTRODUCTION TO SOCIOLOGY or</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester II

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC-114 CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
<tr>
<td>BUS-102 INTRODUCTION TO BUSINESS or</td>
<td>3</td>
</tr>
<tr>
<td>BUS-185 BUSINESS LAW I or</td>
<td>3</td>
</tr>
<tr>
<td>FIN-121 PERSONAL FINANCE (ONLINE ONLY) or</td>
<td>3</td>
</tr>
<tr>
<td>MGT-130 PRINCIPLES OF SUPERVISION or</td>
<td>3</td>
</tr>
<tr>
<td>MGT-170 HUMAN RESOURCES MANAGEMENT or</td>
<td>3</td>
</tr>
<tr>
<td>MKT-110 PRINCIPLES OF MARKETING or</td>
<td>3</td>
</tr>
<tr>
<td>MKT-160 PRINCIPLES OF RETAILING or</td>
<td>3</td>
</tr>
<tr>
<td>SMM-108 SOCIAL MEDIA ENGAGEMENT</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 36-65

Where will this take me?

Administrative Assistant
Executive Assistant
Marketing Secretary
Office Manager / Planner
Program Coordinator
Records Clerk

Instructor and Staff

Trisha Hopper
Assistant Professor
(319) 208-5000 ext. 5212
thopper@scciowa.edu
AA, Carl Sandburg college
BA, Western Illinois University

Carla Pilkington
Assistant Professor
(319) 208-5000 ext. 1986
cpilkington@scciowa.edu
Diploma & AA, Southeastern Community College
BA, Buena Vista University, Storm Lake, IA
Additional study: UNI, Cedar Falls, IA

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu-resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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 Legal Professional - AAS

Students who desire a lighter academic load or who need preparatory work in English, mathematics or keyboarding may want to consider one or two semesters of preparatory work prior to entering the associate of applied science program. Prospective or incoming students must be tested for placement before registering for Administrative Professional classes.

West Burlington campus and/or online (Keokuk campus offers select courses)

Fall Semester I
ADM-117 KEYBOARDING AND DOCUMENT PRODUCTION 3
ADM-198 LEGAL TERMINOLOGY 2
ADM-204 LEGAL OFFICE PROCEDURES 3
CRJ-100 INTRODUCTION TO CRIMINAL JUSTICE 3
CSC-110 INTRODUCTION TO COMPUTERS 3
ENG-131 BUSINESS ENGLISH 3

Spring Semester I
ADM-120 ADVANCED DOCUMENT PRODUCTION 3
ADM-171 RECORDS MANAGEMENT 2
BUS-121 BUSINESS COMMUNICATIONS 3
PRL-284 LEGAL ETHICS 2
BIO-105 INTRODUCTORY BIOLOGY or MAT-702 INTRODUCTION TO MATH APPLICATIONS or MAT-772 APPLIED MATH (ONLINE ONLY) or PHS-151 INTRODUCTION TO ASTRONOMY or PHS-165 INTRODUCTION TO METEOROLOGY or PHS-185 INTRODUCTION TO EARTH SCIENCE 3
PSY-102 HUMAN AND WORK RELATIONS or PSY-111 INTRODUCTION TO PSYCHOLOGY or SOC-110 INTRODUCTION TO SOCIOLOGY or SOC-114 CONFLICT RESOLUTION IN THE WORKPLACE 3

Fall Semester II
ADM-133 BUSINESS MATH AND CALCULATORS 3
ADM-149 TRANSCRIPTION 3
ADM-230 INTEGRATED OFFICE PROJECTS 3
LGL-173 LEGAL ASSISTANT LITIGATION 3
SMM-108 SOCIAL MEDIA ENGAGEMENT 3
SPC-101 FUNDAMENTALS OF ORAL COMMUNICATION or SPC-112 PUBLIC SPEAKING 3

Spring Semester II
ADM-186 LEGAL DOCUMENTS 2
ADM-235 ADVANCED INTEGRATED OFFICE PROJECTS 3
BUS-290 EMPLOYMENT SEARCH/WORKPLACE SUCCESS 1
BUS-932 BUSINESS INTERNSHIP 4
LGL-280 LEGAL CASE STUDIES 3

Program Total: 64-65

Where will this take me?

Legal Secretary
Legal Transcriptionist

Instructor and Staff

Trisha Hopper
Assistant Professor
(319) 208-5000 ext. 5212
thopper@scciowa.edu
AA, Carl Sandburg College
BA, Western Illinois University

Carla Pilkington
Assistant Professor
(319) 208-5000 ext. 5293
cpilkington@scciowa.edu
Diploma & AA, Southeastern
BA, Buena Vista University, Storm Lake, IA
Additional study: UNI, Cedar Falls, IA

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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

www.scciowa.edu (319) 208-5000
### Advanced Automation and Robotics Technology

Electrical Maintenance Technology Certificate awarded after successful completion of first semester courses.

Mechanical Maintenance Technology Certificate awarded after successful completion of second semester courses.

Industrial Maintenance Technology Diploma awarded after successful completion of first year.

#### Keokuk Campus

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-121</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>ELE-195</td>
<td>MOTOR CONTROLS</td>
<td>3</td>
</tr>
<tr>
<td>ELE-310</td>
<td>INDUSTRIAL ELECTRICITY</td>
<td>2</td>
</tr>
<tr>
<td>ELT-250</td>
<td>PROGRAMMABLE LOGIC CONTROLLERS</td>
<td>3</td>
</tr>
<tr>
<td>ELT-295</td>
<td>AC/DC FUNDAMENTALS</td>
<td>2</td>
</tr>
<tr>
<td>IND-163</td>
<td>OSHA AND PLANT SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>MAT-702</td>
<td>INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fall Semester II**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE-218</td>
<td>MOTION CONTROL</td>
<td>2</td>
</tr>
<tr>
<td>ELT-132</td>
<td>MOTOR DRIVES</td>
<td>1</td>
</tr>
<tr>
<td>ELT-262</td>
<td>ADVANCED PLC AND SYSTEM INTEGRATION (MECHATRONICS)</td>
<td>6</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>HIS-151</td>
<td>US HISTORY TO 1877 or</td>
<td>3</td>
</tr>
<tr>
<td>HIS-152</td>
<td>US HISTORY SINCE 1877 or</td>
<td>3</td>
</tr>
<tr>
<td>PHI-101</td>
<td>INTRODUCTION TO PHILOSOPHY or</td>
<td>3</td>
</tr>
<tr>
<td>PHI-105</td>
<td>INTRODUCTION TO ETHICS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR-118</td>
<td>AUTOMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>ATR-135</td>
<td>ADVANCED AUTOMATION AND ROBOTICS</td>
<td>3</td>
</tr>
<tr>
<td>ELE-127</td>
<td>TROUBLESHOOTING</td>
<td>1</td>
</tr>
<tr>
<td>ELE-219</td>
<td>SUPERVISORY CONTROL AND DATA ACQUISITION</td>
<td>3</td>
</tr>
<tr>
<td>ELT-176</td>
<td>INSTRUMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>BIO-105</td>
<td>INTRODUCTORY BIOLOGY or</td>
<td>4</td>
</tr>
<tr>
<td>ENV-111</td>
<td>ENVIRONMENTAL SCIENCE or</td>
<td>4</td>
</tr>
<tr>
<td>PHS-151</td>
<td>INTRODUCTION TO ASTRONOMY</td>
<td>3</td>
</tr>
<tr>
<td>CAD-114</td>
<td>AUTOCAD [ONLINE ONLY] or</td>
<td>2</td>
</tr>
<tr>
<td>CAD-172</td>
<td>INTRODUCTION TO CAD: AUTO CAD [ONLINE ONLY]</td>
<td>2</td>
</tr>
</tbody>
</table>

**Program Total**: 67-68

**Where will this take me?**

- Robotics Technician
- Robotics Engineer
- Computer Controlled Machine Tool Operator
- Electro-Mechanical Technician
- Instructor and Staff

Jason Radel
Instructor
(319) 524-3221 ext. 1990
jradel@scciowa.edu

AAS- Biomedical Electronics, Southeastern Community College
RS Logix 5000 and Control Logix Certified

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Advanced Manufacturing Technology - AAS

This 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.

West Burlington campus (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-101 INTRODUCTION TO CAD</td>
<td>3</td>
</tr>
<tr>
<td>DRF-113 FUNDAMENTALS OF TECHNICAL DRAFTING</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105 COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>IND-163 OSHA AND PLANT SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>MAT-702 INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>MFG-212 BASIC MACHINE THEORY</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-277 3-D DIMENSIONAL (3-D) MODELING</td>
<td>3</td>
</tr>
<tr>
<td>EGT-116 CONTINUOUS QUALITY MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>MFG-237 INTRODUCTION TO MACHINE TRADES</td>
<td>3</td>
</tr>
<tr>
<td>SOC-114 CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
<tr>
<td>SPC-112 PUBLIC SPEAKING</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-140 PARAMETRIC SOLID MODELING</td>
<td>3</td>
</tr>
<tr>
<td>MFG-156 INTRODUCTION TO CNC MACHINING</td>
<td>3</td>
</tr>
<tr>
<td>MFG-206 MANUFACTURING PROCESSES I</td>
<td>3</td>
</tr>
<tr>
<td>MFG-228 MACHINE OPERATIONS II</td>
<td>4</td>
</tr>
<tr>
<td>PHY-160 GENERAL PHYSICS I</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-230 GEOMETRIC DIMENSIONING/ TOLERANCING</td>
<td>2</td>
</tr>
<tr>
<td>ELE-127 TROUBLESHOOTING</td>
<td>1</td>
</tr>
<tr>
<td>MFG-165 ENGINEERING MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>MFG-303 ADVANCED CNC PROGRAMMING</td>
<td>6</td>
</tr>
<tr>
<td>MFG-323 MASTERCAM DESIGN</td>
<td>2</td>
</tr>
<tr>
<td>MFG-511 LEAN QUALITY MANUFACTURING</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Total................................................................. 68-68

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

Brad Junker
Instructor
(319) 208-5000 ext. 5182
bjunker@scciowa.edu
Journeyman Machinist

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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 - AAS

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, 3-D animation, production, modeling, texturing, rendering and lighting, motion graphics, stop motion, technical and character animation and demo reel will be emphasized.

This broad-based instructional program will also feature training in a number of industry-specific software applications, including Photoshop, Illustrator, Maya, 3DS Max, Z Brush, Blender and Combustion.

West Burlington Campus

Fall Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANI-101</td>
<td>ANIMATION SOFTWARE I</td>
<td>3</td>
</tr>
<tr>
<td>ANI-116</td>
<td>EXPLORING HUMAN MOVEMENT</td>
<td>3</td>
</tr>
<tr>
<td>ANI-136</td>
<td>STOP MOTION/VIDEO PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>ART-133</td>
<td>DRAWING</td>
<td>3</td>
</tr>
<tr>
<td>DRA-110</td>
<td>INTRODUCTION TO FILM</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANI-100</td>
<td>STORY DEVELOPMENT FOR ANIMATION</td>
<td>3</td>
</tr>
<tr>
<td>ANI-102</td>
<td>ANIMATION SOFTWARE II</td>
<td>3</td>
</tr>
<tr>
<td>ANI-109</td>
<td>ANIMATION PRINCIPLES AND TECHNIQUES</td>
<td>5</td>
</tr>
<tr>
<td>ART-138</td>
<td>FIGURE DRAWING</td>
<td>3</td>
</tr>
<tr>
<td>ENG-221</td>
<td>CREATIVE WRITING or</td>
<td>3</td>
</tr>
<tr>
<td>LIT-209</td>
<td>FORMS OF LITERATURE: FILM ADAPTATION</td>
<td>3</td>
</tr>
</tbody>
</table>

Fall Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANI-103</td>
<td>ANIMATION SOFTWARE III</td>
<td>3</td>
</tr>
<tr>
<td>ANI-210</td>
<td>INTERMEDIATE ANIMATION</td>
<td>5</td>
</tr>
<tr>
<td>ANI-952</td>
<td>TOPICS-ANIMATION</td>
<td>2</td>
</tr>
<tr>
<td>GRA-299</td>
<td>ELECTRONIC PORTFOLIO</td>
<td>3</td>
</tr>
<tr>
<td>MAT-110</td>
<td>MATH FOR LIBERAL ARTS</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANI-104</td>
<td>ANIMATION SOFTWARE IV</td>
<td>3</td>
</tr>
<tr>
<td>ANI-166</td>
<td>CAPSTONE AND DEMO REEL FOR ANIMATION</td>
<td>3</td>
</tr>
<tr>
<td>ANI-211</td>
<td>ADVANCED ANIMATION</td>
<td>5</td>
</tr>
<tr>
<td>ART-120</td>
<td>2-D DESIGN or</td>
<td>3</td>
</tr>
<tr>
<td>ART-123</td>
<td>3-D DESIGN or</td>
<td>4</td>
</tr>
<tr>
<td>ART-143</td>
<td>PAINTING or</td>
<td>3</td>
</tr>
<tr>
<td>ART-184</td>
<td>PHOTOGRAPHY or</td>
<td>3</td>
</tr>
<tr>
<td>BIO-163</td>
<td>ESSENTIALS OF ANATOMY AND PHYSIOLOGY or</td>
<td>4</td>
</tr>
<tr>
<td>DRA-141</td>
<td>THEATRE AND SPEECH PARTICIPATION</td>
<td>1</td>
</tr>
<tr>
<td>ANI-932</td>
<td>INTERNSHIP or</td>
<td>3.7</td>
</tr>
<tr>
<td>ANI-941</td>
<td>ANIMATION STUDIO PRACTICUM</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total........................................................................66-69.7

Where will this take me?

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

Instructor and Staff

Tyler Horn
Assistant Professor
(319) 208-5000 ext. 5256
thorn@scciowa.edu
BFA, The Illinois Institute of Art at Schaumburg

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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 - Diploma and AAS

After successful completion of the first two semesters the Auto Mechanics Diploma will be awarded.

West Burlington campus (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT-106 INTRODUCTION TO AUTOMOTIVE TECHNOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>AUT-126 FUNDAMENTALS OF AUTOMOTIVE SERVICING</td>
<td>2</td>
</tr>
<tr>
<td>AUT-405 AUTOMOTIVE SUSPENSION AND STEERING</td>
<td>5</td>
</tr>
<tr>
<td>AUT-505 AUTOMOTIVE BRAKE SYSTEMS</td>
<td>5</td>
</tr>
<tr>
<td>HSC-181 FIRST AID/CPR FOR NON-HEALTH CARE WORKERS</td>
<td>1.5</td>
</tr>
<tr>
<td>MAT-702 INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT-166 AUTOMOTIVE ENGINE REPAIR</td>
<td>6</td>
</tr>
<tr>
<td>AUT-244 MANUAL DRIVETRAINS I</td>
<td>3</td>
</tr>
<tr>
<td>AUT-610 AUTOMOTIVE ELECTRICAL I</td>
<td>4</td>
</tr>
<tr>
<td>COM-102 COMMUNICATION SKILLS</td>
<td>3</td>
</tr>
<tr>
<td>SCI-115 BASIC ELECTRICITY</td>
<td>2</td>
</tr>
<tr>
<td>SDV-125 WORKPLACE READINESS</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Semester</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC-114 CONFLICT RESOLUTION IN THE WORKPLACE or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-115 SOCIAL PROBLEMS</td>
<td>3</td>
</tr>
<tr>
<td>HIS-251 US HISTORY: 1945 TO PRESENT or</td>
<td>3</td>
</tr>
<tr>
<td>HUM-287 LEADERSHIP DEVELOPMENT STUDIES or</td>
<td>3</td>
</tr>
<tr>
<td>PHI-105 INTRODUCTION TO ETHICS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT-625 AUTOMOTIVE ELECTRICAL II</td>
<td>8</td>
</tr>
<tr>
<td>AUT-800 ENGINE PERFORMANCE</td>
<td>8</td>
</tr>
<tr>
<td>PSY-111 INTRODUCTION TO PSYCHOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110 INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT-190 HYBRID FUNDAMENTALS</td>
<td>2</td>
</tr>
<tr>
<td>AUT-207 AUTOMATIC TRANSMISSIONS/TRANSAXLES</td>
<td>6</td>
</tr>
<tr>
<td>AUT-246 MANUAL DRIVETRAINS II</td>
<td>3</td>
</tr>
<tr>
<td>AUT-700 AUTOMOTIVE HEATING AND AIR CONDITIONING</td>
<td>2.5</td>
</tr>
<tr>
<td>AUT-911 INTERNSHIP</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Total ........................................................................ 80-80

Where will this take me?

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

Instructor and Staff

Wes Carpenter
Assistant Professor
(319) 208-5000 ext. 5109
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
(319) 208-5000 ext. 5108
thunter@scciowa.edu
AAS, Indian Hills Community College

Kelly Kroll
Administrative Assistant to the Dean of CTE
(319) 208-5000 ext. 5107
kkroll@scciowa.edu

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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/gainemp.aspx

www.scciowa.edu (319) 208-5000
After successful completion of the first two semesters, the Auto Mechanics Diploma will be awarded. This is an option of the Automotive Technology Program allowing students to pursue a management track in their second year.

**West Burlington campus (Keokuk campus offers select courses)**

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT-106 INTRODUCTION TO AUTOMOTIVE TECHNOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>AUT-126 FUNDAMENTALS OF AUTOMOTIVE SERVICING</td>
<td>2</td>
</tr>
<tr>
<td>AUT-405 AUTOMOTIVE SUSPENSION AND STEERING</td>
<td>5</td>
</tr>
<tr>
<td>AUT-505 AUTOMOTIVE BRAKE SYSTEMS</td>
<td>5</td>
</tr>
<tr>
<td>HSC-181 FIRST AID/CPR FOR NON-HEALTH CARE WORKERS</td>
<td>1.5</td>
</tr>
<tr>
<td>MAT-702 INTRODUCTION TO MAT APPLICATIONS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT-166 AUTOMOTIVE ENGINE REPAIR</td>
<td>6</td>
</tr>
<tr>
<td>AUT-244 MANUAL DRIVETRAINS I</td>
<td>3</td>
</tr>
<tr>
<td>AUT-610 AUTOMOTIVE ELECTRICAL I</td>
<td>4</td>
</tr>
<tr>
<td>COM-102 COMMUNICATION SKILLS</td>
<td>3</td>
</tr>
<tr>
<td>SCI-115 BASIC ELECTRICITY</td>
<td>2</td>
</tr>
<tr>
<td>SDV-125 WORKPLACE READINESS</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Semester</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC-114 CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
<tr>
<td>SOC-115 SOCIAL PROBLEMS</td>
<td>3</td>
</tr>
<tr>
<td>HIS-251 US HISTORY: 1945 TO PRESENT</td>
<td>3</td>
</tr>
<tr>
<td>PHI-105 INTRODUCTION TO ETHICS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM-117 KEYBOARDING AND DOCUMENT PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>BUS-102 INTRODUCTION TO BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>BUS-180 BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>MGT-101 PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>ACC-131 PRINCIPLES OF ACCOUNTING I or</td>
<td>4</td>
</tr>
<tr>
<td>ACC-111 INTRODUCTION TO ACCOUNTING</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-121 BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>HUM-287 LEADERSHIP DEVELOPMENT STUDIES</td>
<td>3</td>
</tr>
<tr>
<td>MKT-110 PRINCIPLES OF MARKETING</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111 INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110 INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>MGT-130 PRINCIPLES OF SUPERVISION</td>
<td>3</td>
</tr>
<tr>
<td>MGT-170 HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 73.5-74.5

**Where will this take me?**

- Repair shop manager
- Automotive Engineer
- Transportation Manager

**Instructor and Staff**

- Wes Carpenter
  - Assistant Professor
  - AAS, Lincoln Technical Institute
  - ASE Master Tech
  - ASE Advanced Engine Performance
  - GM and Ford Certified
  - (319) 208-5000 ext. 5109
  - wcarpenter@scciowa.edu

- Timothy Hunter
  - Instructor
  - (319) 208-5000 ext. 5108
  - tahunter@scciowa.edu

- Kelly Kroll
  - Administrative Assistant to the Dean of CTE
  - (319) 208-5000 ext. 5107
  - kkroll@scciowa.edu

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Admissions standards apply to this program. Please contact the Admissions office for details.

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

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester I</td>
<td>CAD-101</td>
<td>INTRODUCTION TO CAD</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CSC-140</td>
<td>COMPUTER FUNDAMENTALS</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ELT-116</td>
<td>PRINCIPLES OF ELECTRONICS</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>MAT-127</td>
<td>COLLEGE ALGEBRA AND TRIGNOMETRY or</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>MAT-704</td>
<td>MATH APPLICATIONS</td>
<td>5</td>
</tr>
<tr>
<td>Spring Semester I</td>
<td>BIO-163</td>
<td>ESSENTIALS OF ANATOMY AND PHYSIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ELT-119</td>
<td>APPLIED HUMAN BIOLOGY FOR BIOMED TECHNICIANS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELT-355</td>
<td>ELECTRONIC CIRCUITS I</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EGR-420</td>
<td>PLTW DIGITAL ELECTRONICS or ELT-329</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELT-357</td>
<td>ELECTRONIC CIRCUITS II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ELT-630</td>
<td>MICROPROCESSOR/INTERFACING</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ELT-800</td>
<td>BIOMEDICAL ELECTRONIC SYSTEMS</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>NET-142</td>
<td>NETWORK ESSENTIALS</td>
<td>3</td>
</tr>
<tr>
<td>Fall Semester II</td>
<td>ELT-357</td>
<td>ELECTRONIC CIRCUITS II</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ELT-630</td>
<td>MICROPROCESSOR/INTERFACING</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ELT-800</td>
<td>BIOMEDICAL ELECTRONIC SYSTEMS</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>NET-142</td>
<td>NETWORK ESSENTIALS</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester II</td>
<td>ELT-435</td>
<td>TELECOMMUNICATIONS</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>ELT-801</td>
<td>MEDICAL DOCUMENTATION AND COMPLIANCE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELT-932</td>
<td>INTERNSHIP</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY or SOC-110</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC-110</td>
<td>INTRODUCTION TO SOCIOLOGY or SOC-114</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC-114</td>
<td>CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 67-68

**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  
(319) 208-5000 ext. 5211  
dschreiner@scciowa.edu  
AS & AA, Southeastern Community College  
BA, Iowa Wesleyan College  
Additional study: St. Ambrose University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Business Administration - AAS

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

West Burlington campus and/or online (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Fall Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-102</td>
<td>INTRODUCTION TO BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>CSC-110</td>
<td>INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>ENG-131</td>
<td>BUSINESS ENGLISH</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Spring Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC-142</td>
<td>FINANCIAL ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>BUS-121</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>BUS-180</td>
<td>BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>MGT-130</td>
<td>PRINCIPLES OF SUPERVISION</td>
<td>3</td>
</tr>
<tr>
<td>MKT-110</td>
<td>PRINCIPLES OF MARKETING</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Fall Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-185</td>
<td>BUSINESS LAW I</td>
<td>3</td>
</tr>
<tr>
<td>ECN-130</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>MAT-156</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>MGT-101</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td>MKT-140</td>
<td>PRINCIPLES OF SELLING or</td>
<td>3</td>
</tr>
<tr>
<td>MKT-150</td>
<td>PRINCIPLES OF ADVERTISING</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Spring Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC-146</td>
<td>MANAGERIAL ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>BUS-936</td>
<td>BUSINESS CAPSTONE</td>
<td>1</td>
</tr>
<tr>
<td>ECN-120</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>FIN-130</td>
<td>PRINCIPLES OF FINANCE (ONLINE ONLY)</td>
<td>3</td>
</tr>
<tr>
<td>HUM-287</td>
<td>LEADERSHIP DEVELOPMENT STUDIES</td>
<td>3</td>
</tr>
<tr>
<td>MGT-170</td>
<td>HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 64-64

Where will this take me?

Administrative Assistant
Business Manager
Human Resource Manager
Marketing, Advertising & Public Relations Manager
Merchandise Manager
Office Manager
Supervisor

Instructor and Staff

Stephani Smith
Instructor
(319) 208-5000 ext. 5217
ssmith2@scciowa.edu
BA, Iowa Wesleyan College
MBA, Upper Iowa University

Deborah Wright
Professor
(319) 208-5000 ext. 5226
dwright@scciowa.edu
AA, Southeastern Community College
BBA, Western Illinois University
MA, Western Illinois University
PhD, Northern Illinois University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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

Kevin Rosenberg
Professor
(319) 208-5000 ext. 5199
krosenberg@scciowa.edu
BBA, University of Iowa
MA, University of Iowa
Collision Repair and Restoration - Diploma and AAS

After successful completion of the first two semesters, the Auto Body Diploma will be awarded.

**West Burlington Campus**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRR-300</td>
<td>PREPARATION</td>
<td>2</td>
</tr>
<tr>
<td>CRR-340</td>
<td>METAL STRAIGHTENING</td>
<td>3</td>
</tr>
<tr>
<td>CRR-400</td>
<td>PANEL REPLACEMENT AND ADJUSTMENT</td>
<td>3.5</td>
</tr>
<tr>
<td>CRR-500</td>
<td>DAMAGE ANALYSIS</td>
<td>2</td>
</tr>
<tr>
<td>CRR-800</td>
<td>INTRODUCTION TO AUTOMOTIVE REFINISHING</td>
<td>2.5</td>
</tr>
<tr>
<td>MAT-702</td>
<td>INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>SCI-115</td>
<td>BASIC ELECTRICITY</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRR-120</td>
<td>MIG (GMAW) WELDING</td>
<td>3</td>
</tr>
<tr>
<td>CRR-454</td>
<td>GLASS REPLACEMENT</td>
<td>2</td>
</tr>
<tr>
<td>CRR-525</td>
<td>STRAIGHTENING STRUCTURAL PARTS</td>
<td>5.5</td>
</tr>
<tr>
<td>CRR-610</td>
<td>STEERING AND SUSPENSION</td>
<td>1.5</td>
</tr>
<tr>
<td>CRR-812</td>
<td>SURFACE PREPARATION</td>
<td>5</td>
</tr>
<tr>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-133</td>
<td>DRAWING</td>
<td>3</td>
</tr>
<tr>
<td>HIS-251</td>
<td>US HISTORY: 1945 TO PRESENT or</td>
<td>3</td>
</tr>
<tr>
<td>PHI-105</td>
<td>INTRODUCTION TO ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>SOC-114</td>
<td>CONFLICT RESOLUTION IN THE WORKPLACE or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-115</td>
<td>SOCIAL PROBLEMS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRR-201</td>
<td>PLASTIC REPAIR</td>
<td>2</td>
</tr>
<tr>
<td>CRR-575</td>
<td>ADVANCED STRUCTURAL REPAIR</td>
<td>6</td>
</tr>
<tr>
<td>CRR-580</td>
<td>ADVANCED FRAME STRAIGHTENING</td>
<td>6</td>
</tr>
<tr>
<td>CRR-765</td>
<td>COMPUTER DIAGNOSIS FOR AUTO COLLISION</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRR-410</td>
<td>FULL OR PARTIAL BODY PANEL REPLACEMENT</td>
<td>3.5</td>
</tr>
<tr>
<td>CRR-818</td>
<td>INTRODUCTION TO WATERBORNE FINISHES</td>
<td>2</td>
</tr>
<tr>
<td>CRR-845</td>
<td>COLOR TINTING AND MATCHING</td>
<td>2.5</td>
</tr>
<tr>
<td>CRR-875</td>
<td>ADVANCED REFINISHING METHODS</td>
<td>6</td>
</tr>
<tr>
<td>CRR-932</td>
<td>INTERNSHIP</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Total............................................................................. 84-84

**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

Assuming the student graduates with an AAS degree.

Paint Product Rep/Sales
Paint Retailer
Windmill Blade Repair Technician

**Instructor and Staff**

Randy Wachter  
Assistant Professor  
(319) 208-5000 ext. 5110  
rwachter@scciowa.edu  
AAS, Southeastern community College

Tim Weaver  
Assistant Professor  
(319) 208-5000 ext. 5111  
tweaver@scciowa.edu  
ASE Master Collision Repair

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Computer Aided Design (CAD) is the process of visualizing and developing models in two- and three-dimensional environments. Students leave the program with the ability to create detailed product and assembly drawings, as well as architectural blueprints.

Several software programs are introduced in class, helping graduates easily adapt to CAD software once they’re working in the field.

**West Burlington Campus**

### Fall Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-101</td>
<td>INTRODUCTION TO CAD</td>
<td>3</td>
</tr>
<tr>
<td>CSC-110</td>
<td>INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>DRF-113</td>
<td>FUNDAMENTALS OF TECHNICAL DRAFTING</td>
<td>3</td>
</tr>
<tr>
<td>MFG-212</td>
<td>BASIC MACHINE THEORY</td>
<td>3</td>
</tr>
<tr>
<td>MAT-127</td>
<td>COLLEGE ALGEBRA AND TRIGONOMETRY or</td>
<td>5</td>
</tr>
<tr>
<td>MAT-704</td>
<td>MATH APPLICATIONS</td>
<td>5</td>
</tr>
</tbody>
</table>

### Spring Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-277</td>
<td>3-D DIMENSIONAL (3-D) MODELING I</td>
<td>3</td>
</tr>
<tr>
<td>SOC-114</td>
<td>CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I or</td>
<td>3</td>
</tr>
<tr>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
<tr>
<td>SPC-101</td>
<td>FUNDAMENTALS OF ORAL COMMUNICATION or</td>
<td>3</td>
</tr>
<tr>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td>PHY-106</td>
<td>SURVEY OF PHYSICS or</td>
<td>4</td>
</tr>
<tr>
<td>PHY-160</td>
<td>GENERAL PHYSICS I</td>
<td>5</td>
</tr>
</tbody>
</table>

### Fall Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC-113</td>
<td>ARCHITECTURAL DRAFTING I</td>
<td>4</td>
</tr>
<tr>
<td>DRF-121</td>
<td>FUNDAMENTALS OF TECHNICAL DRAFTING II</td>
<td>3</td>
</tr>
<tr>
<td>SDV-125</td>
<td>WORKPLACE READINESS</td>
<td>1</td>
</tr>
<tr>
<td>CAD-140</td>
<td>PARAMETRIC SOLID MODELING (ONLINE ONLY) or</td>
<td>3</td>
</tr>
<tr>
<td>EGT-400</td>
<td>PLTW-INTRODUCTION TO ENGINEERING DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ANI-101</td>
<td>ANIMATION SOFTWARE I or</td>
<td>3</td>
</tr>
<tr>
<td>CON-270</td>
<td>MECHANICAL SYSTEMS or</td>
<td>3</td>
</tr>
<tr>
<td>NET-122</td>
<td>COMPUTER HARDWARE BASICS</td>
<td>3</td>
</tr>
</tbody>
</table>

### Spring Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC-129</td>
<td>RESIDENTIAL/LIGHT COMMERCIAL DRAFTING</td>
<td>4</td>
</tr>
<tr>
<td>CAD-230</td>
<td>GEOMETRIC DIMENSIONING/ TOLERANCING</td>
<td>2</td>
</tr>
<tr>
<td>CAD-248</td>
<td>PARAMETRIC CAD II</td>
<td>3</td>
</tr>
<tr>
<td>MFG-511</td>
<td>LEAN QUALITY MANUFACTURING</td>
<td>4</td>
</tr>
</tbody>
</table>

**Program Total: ................................................................. 60-61**

**Where will this take me?**

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

**Instructor and Staff**

Jonathan Gaddis  
Associate Professor  
(319) 208-5000 ext. 5258  
jgaddis@scciowa.edu  
AAS, Southeastern Community College  
BA, Iowa Wesley College  
MBA, St. Ambrose University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
MAT-127 is required for transfer to a four-year university.

After successful completion of the first semester the Building Construction Certificate will be awarded. After successful completion of the first three semesters the Building Construction Diploma will be awarded.

A completed apprenticeship program may be substituted for CON-147, CON-148, CON-149, and CON-262. Students who have completed an apprenticeship approved by the Bureau of Apprenticeship & Training and the Iowa Department of Education will be allowed to articulate up to 29 credits after 12 credits of "C: or better are earned in the approved Construction Technology degree program at SCC.

### West Burlington Campus

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester I</td>
<td>CON-108</td>
<td>CONSTRUCTION SAFETY</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>CON-147</td>
<td>CARPENTRY I</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>CON-332</td>
<td>CONSTRUCTION MATERIALS AND RESOURCES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG-105</td>
<td>COMPOSITION I or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester I</td>
<td>CAD-101</td>
<td>INTRODUCTION TO CAD</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CON-113</td>
<td>CONSTRUCTION PRINTREADING</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CON-148</td>
<td>CARPENTRY II</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>CON-252</td>
<td>CONSTRUCTION ELECTRICITY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC-114</td>
<td>CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
<tr>
<td>Summer Semester</td>
<td>CON-350</td>
<td>INTERNSHIP</td>
<td>5</td>
</tr>
<tr>
<td>Fall Semester II</td>
<td>CON-149</td>
<td>CARPENTRY III</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>CON-270</td>
<td>MECHANICAL SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT-702</td>
<td>INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CON-340</td>
<td>CONSTRUCTION SURVEYING or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HEQ-131</td>
<td>SAFETY AND INTRODUCTION TO HEAVY EQUIPMENT</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester II</td>
<td>CON-128</td>
<td>CONSTRUCTION MANAGEMENT ESTIMATING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CON-262</td>
<td>COMMERCIAL CARPENTRY II</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>CON-345</td>
<td>SOILS AND CONCRETE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PSY-102</td>
<td>HUMAN AND WORK RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ART-133</td>
<td>DRAWING or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Program Total................................</td>
<td>68-68</td>
</tr>
</tbody>
</table>

**Where will this take me?**

Carpenter
Concrete Finisher
Construction Materials Sales Representative
Estimator

[Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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 - Management AAS

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.

West Burlington Campus

Fall Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-108</td>
<td>CONSTRUCTION SAFETY</td>
<td>1</td>
</tr>
<tr>
<td>CON-332</td>
<td>CONSTRUCTION MATERIALS AND RESOURCES</td>
<td>3</td>
</tr>
<tr>
<td>DRF-113</td>
<td>FUNDAMENTALS OF TECHNICAL DRAFTING</td>
<td>3</td>
</tr>
<tr>
<td>ECN-120</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>MAT-127</td>
<td>COLLEGE ALGEBRA AND TRIGONOMETRY</td>
<td>5</td>
</tr>
</tbody>
</table>

Spring Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC-142</td>
<td>FINANCIAL ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>CAD-101</td>
<td>INTRODUCTION TO CAD</td>
<td>3</td>
</tr>
<tr>
<td>CON-113</td>
<td>CONSTRUCTION PRINTREADING</td>
<td>2</td>
</tr>
<tr>
<td>PSY-102</td>
<td>HUMAN AND WORK RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td>HIS-151</td>
<td>US HISTORY TO 1877 or</td>
<td>3</td>
</tr>
<tr>
<td>HIS-152</td>
<td>US HISTORY SINCE 1877</td>
<td>3</td>
</tr>
</tbody>
</table>

Summer Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-350</td>
<td>INTERNSHIP</td>
<td>5</td>
</tr>
</tbody>
</table>

Fall Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC-113</td>
<td>ARCHITECTURAL DRAFTING I</td>
<td>4</td>
</tr>
<tr>
<td>MGT-101</td>
<td>PRINCIPLES OF MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>PHY-160</td>
<td>GENERAL PHYSICS I</td>
<td>5</td>
</tr>
<tr>
<td>CON-340</td>
<td>CONSTRUCTION SURVEYING or</td>
<td>3</td>
</tr>
<tr>
<td>HEQ-131</td>
<td>SAFETY AND INTRODUCTION TO HEAVY EQUIPMENT</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-128</td>
<td>CONSTRUCTION MANAGEMENT ESTIMATING</td>
<td>3</td>
</tr>
<tr>
<td>CON-345</td>
<td>SOILS AND CONCRETE</td>
<td>3</td>
</tr>
<tr>
<td>PHY-161</td>
<td>GENERAL PHYSICS II</td>
<td>5</td>
</tr>
<tr>
<td>SOC-114</td>
<td>CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
<tr>
<td>ART-133</td>
<td>DRAWING or</td>
<td>3</td>
</tr>
<tr>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total.................................................................69-69

Where will this take me?

Job Site Superintendent

Supervisory Managing Positions

Instructor and Staff

Douglas Riley
Assistant Professor
(319) 208-5000 ext. 5184
driley@scciowa.edu
AA, Southeastern Community College
BA, Iowa Wesleyan College

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Electronics Technology - Diploma

The Electronics Technology Diploma is a two semester selection of core courses intended to give a solid introduction to electronics technology.

West Burlington Campus (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-101</td>
<td>INTRODUCTION TO CAD</td>
<td>3</td>
</tr>
<tr>
<td>CSC-140</td>
<td>COMPUTER FUNDAMENTALS</td>
<td>4</td>
</tr>
<tr>
<td>ELT-116</td>
<td>PRINCIPLES OF ELECTRONICS</td>
<td>5</td>
</tr>
<tr>
<td>MAT-702</td>
<td>INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>ELT-232</td>
<td>PLC APPLICATIONS</td>
<td>4</td>
</tr>
<tr>
<td>ELT-355</td>
<td>ELECTRONIC CIRCUITS I</td>
<td>5</td>
</tr>
<tr>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
<tr>
<td>EGR-420</td>
<td>PLTW DIGITAL ELECTRONICS or</td>
<td>3</td>
</tr>
<tr>
<td>ELT-329</td>
<td>DIGITAL ELECTRONICS FOR ET</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Total: ......................................................... 30-31

Where will this take me?

Field Service Technician
Electronics Technician
Robotics Technician
Telecommunications Electronic Technician

Instructor and Staff

Derek Schreiner
Associate Professor
(319) 208-5000 ext. 5211
dschreiner@scciowa.edu
AS & AA, Southeastern Community College
BA, Iowa Wesleyan College
Additional study: St. Ambrose University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Electronics Technology - AAS

SCC’s Electronics Technology programs are intended to provide a broad base of knowledge, through courses and laboratories. Students learn the skills of an electronics technician and in addition develop skills in mechanical design, construction, analysis and repair of various electronic circuits.

West Burlington Campus (Keokuk campus offers select courses)

Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-101</td>
<td>INTRODUCTION TO CAD</td>
<td>3</td>
</tr>
<tr>
<td>CSC-140</td>
<td>COMPUTER FUNDAMENTALS</td>
<td>4</td>
</tr>
<tr>
<td>ELT-116</td>
<td>PRINCIPLES OF ELECTRONICS</td>
<td>5</td>
</tr>
<tr>
<td>MAT-127</td>
<td>COLLEGE ALGEBRA AND TRIGONOMETRY</td>
<td>5</td>
</tr>
<tr>
<td>MAT-704</td>
<td>MATH APPLICATIONS</td>
<td>5</td>
</tr>
</tbody>
</table>

Spring Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT-232</td>
<td>PLC APPLICATIONS</td>
<td>4</td>
</tr>
<tr>
<td>ELT-355</td>
<td>ELECTRONIC CIRCUITS I</td>
<td>5</td>
</tr>
<tr>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
<tr>
<td>EGR-420</td>
<td>PLTW DIGITAL ELECTRONICS or</td>
<td>3</td>
</tr>
<tr>
<td>ELT-329</td>
<td>DIGITAL ELECTRONICS FOR ET</td>
<td>4</td>
</tr>
</tbody>
</table>

Fall Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT-357</td>
<td>ELECTRONIC CIRCUITS II</td>
<td>5</td>
</tr>
<tr>
<td>ELT-486</td>
<td>ELECTROMECHANICAL TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ELT-630</td>
<td>MICROPROCESSOR/INTERFACING</td>
<td>5</td>
</tr>
<tr>
<td>NET-142</td>
<td>NETWORK ESSENTIALS</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT-435</td>
<td>TELECOMMUNICATIONS</td>
<td>5</td>
</tr>
<tr>
<td>MFG-511</td>
<td>LEAN QUALITY MANUFACTURING</td>
<td>4</td>
</tr>
<tr>
<td>PHY-106</td>
<td>SURVEY OF PHYSICS</td>
<td>4</td>
</tr>
<tr>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110</td>
<td>INTRODUCTION TO SOCIOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-114</td>
<td>CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total: 64-65

Where will this take me?

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

Instructor and Staff

Derek Schreiner
Associate Professor
(319) 208-5000 ext. 5211
dschreiner@scct.edu
AS & AA, Southeastern Community College
BA, Iowa Wesleyan College
Additional study: St. Ambrose University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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

www.scciowa.edu (319) 208-5000
Emergency Medical Services - AAS

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

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. 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.

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

Emergency Medical Technician Certificate awarded after completion of EMS-201.
Paramedic Certificate awarded after completion of EMS-665.

West Burlington campus, Keokuk campus, select courses online. The following courses must be taken at the West Burlington location: EMS-201, EMS-663, EMS-664, EMS-665. All other courses can be taken at the West Burlington campus, Keokuk campus, or online

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-163 ESSENTIALS OF ANATOMY AND PHYSIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>CSC-110 INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>HSC-114 MEDICAL TERMINOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>MAT-702 INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111 INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS-201 EMERGENCY MEDICAL TECHNICIAN</td>
<td>7</td>
</tr>
<tr>
<td>ENG-105 COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>HUM-114 MULTICULTURAL PERSPECTIVES</td>
<td>3</td>
</tr>
<tr>
<td>PHI-105 INTRODUCTION TO ETHICS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS-663 PARAMEDIC I</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS-664 PARAMEDIC II</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Semester</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS-665 PARAMEDIC III</td>
<td>7</td>
</tr>
</tbody>
</table>

| Program Total | 70-70 |

Where will this take me?
Air Medical Transport
Ambulance Service
Fire Station
Hospital
Industry

Instructor and Staff
James Steffen, Instructor, ext. 5253
Assistant Professor
(319) 208-5000 ext. 5253
jsteffen@scciowa.edu

AAS, Southeastern Community College
Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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

www.scciowa.edu (319) 208-5000
Entrepreneurship

The Certificate in Small Business Management is for those who wish to work in or own a small business. This will be awarded after successful completion of BUS-102, CSC-110, ACC-142, BUS-130, BUS-131, and ENG-131.

The Certificate in Entrepreneurship is for those who wish to own or participate in a small business startup. This will be awarded after successful completion of BUS-135, BUS-138, BUS-145, BUS-184, BUS-141, and BUS-121.

An Entrepreneurship Diploma will be awarded upon successful completion of both Certificate programs.

The Entrepreneurship Diploma is intended for those students who wish to specialize in the creation of new business ventures, evaluate the feasibility of a new venture and identify the available resources for assisting an entrepreneur during the startup phase of the business.

West Burlington campus (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS-102</td>
<td>INTRODUCTION TO BUSINESS</td>
<td>3</td>
</tr>
<tr>
<td>CSC-110</td>
<td>INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>ENG-131</td>
<td>BUSINESS ENGLISH</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC-142</td>
<td>FINANCIAL ACCOUNTING</td>
<td>3</td>
</tr>
<tr>
<td>BUS-121</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>BUS-130</td>
<td>INTRODUCTION TO ENTREPRENEURSHIP</td>
<td>3</td>
</tr>
<tr>
<td>BUS-131</td>
<td>SMALL BUSINESS MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>STRATEGIES</td>
<td></td>
</tr>
<tr>
<td>BUS-180</td>
<td>BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td>Fall Semester II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS-135</td>
<td>MANAGING THE ENTREPRENEURIAL VENTURE</td>
<td>3</td>
</tr>
<tr>
<td>BUS-138</td>
<td>SMALL BUSINESS MARKETING</td>
<td>3</td>
</tr>
<tr>
<td>BUS-145</td>
<td>FINANCIAL ENTREPRENEURSHIP</td>
<td>3</td>
</tr>
<tr>
<td>ECN-130</td>
<td>PRINCIPLES OF MICROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>MAT-156</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS-141</td>
<td>SMALL BUSINESS STARTUP</td>
<td>3</td>
</tr>
<tr>
<td>BUS-184</td>
<td>BASIC LAW FOR ENTREPRENEURS</td>
<td>3</td>
</tr>
<tr>
<td>ECN-120</td>
<td>PRINCIPLES OF MACROECONOMICS</td>
<td>3</td>
</tr>
<tr>
<td>HUM-287</td>
<td>LEADERSHIP DEVELOPMENT STUDIES</td>
<td>3</td>
</tr>
<tr>
<td>MGT-170</td>
<td>HUMAN RESOURCES MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>Program Total</td>
<td></td>
<td>63</td>
</tr>
</tbody>
</table>

Where will this take me?

Small Business Owner
Small Business Manager
Online Merchant
Store Manager

Instructor and Staff

Stephani Smith

Instructor
(319) 208-5000 ext. 5217
ssmith2@scciowa.edu
BA, Iowa Wesleyan College
MBA, Upper Iowa University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Industrial Maintenance Technology

This program is broken down by semester and specialization.

After successful completion of the first semester the Electrical Maintenance Technology Certificate will be awarded.

After successful completion of the second semester the Mechanical Maintenance Technology Certificate will be awarded.

After successful completion of the first and second semesters, the Industrial Maintenance Technology Diploma will be awarded.

Industrial Maintenance Technology AAS Degree awarded when both years of program are completed.

Keokuk Campus

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-121</td>
<td>BUSINESS COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>ELE-195</td>
<td>MOTOR CONTROLS</td>
<td>3</td>
</tr>
<tr>
<td>ELE-310</td>
<td>INDUSTRIAL ELECTRICITY</td>
<td>2</td>
</tr>
<tr>
<td>ELT-250</td>
<td>PROGRAMMABLE LOGIC CONTROLLERS</td>
<td>3</td>
</tr>
<tr>
<td>ELT-295</td>
<td>AC/DC FUNDAMENTALS</td>
<td>2</td>
</tr>
<tr>
<td>IND-163</td>
<td>OSHA AND PLANT SAFETY</td>
<td>2</td>
</tr>
<tr>
<td>MAT-702</td>
<td>INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGT-142</td>
<td>FLUID POWER 1</td>
<td>2</td>
</tr>
<tr>
<td>EGT-143</td>
<td>FLUID POWER 2</td>
<td>2</td>
</tr>
<tr>
<td>ELE-116</td>
<td>BLUEPRINT READING</td>
<td>1</td>
</tr>
<tr>
<td>IND-104</td>
<td>INDUSTRIAL PUMPS</td>
<td>1</td>
</tr>
<tr>
<td>IND-141</td>
<td>POWER TRANSMISSION</td>
<td>2</td>
</tr>
<tr>
<td>MFG-209</td>
<td>MACHINE SHOP PRACTICES</td>
<td>3</td>
</tr>
<tr>
<td>MFG-520</td>
<td>PREDICTIVE MAINTENANCE</td>
<td>2</td>
</tr>
<tr>
<td>PSY-102</td>
<td>HUMAN AND WORK RELATIONS or</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Third Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGT-147</td>
<td>HYDRAULIC POWER SYSTEMS AND TROUBLESHOOTING</td>
<td>1</td>
</tr>
<tr>
<td>ELT-132</td>
<td>MOTOR DRIVES</td>
<td>1</td>
</tr>
<tr>
<td>ELT-262</td>
<td>ADVANCED PLC AND SYSTEM INTEGRATION (MECHATRONICS)</td>
<td>6</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>IND-106</td>
<td>MACHINE SHOP II</td>
<td>2</td>
</tr>
<tr>
<td>IND-107</td>
<td>VALVES</td>
<td>1</td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELE-127</td>
<td>TROUBLESHOOTING</td>
<td>1</td>
</tr>
<tr>
<td>ELT-176</td>
<td>INSTRUMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>IND-179</td>
<td>BOILER OPERATION AND CONTROL</td>
<td>2</td>
</tr>
<tr>
<td>IND-180</td>
<td>INDUSTRIAL HEATING AND COOLING</td>
<td>2</td>
</tr>
<tr>
<td>CAD-101</td>
<td>INTRODUCTION TO CAD or</td>
<td>3</td>
</tr>
<tr>
<td>CAD-114</td>
<td>AUTOCADE [ONLINE ONLY]</td>
<td>2</td>
</tr>
<tr>
<td>HIS-151</td>
<td>US HISTORY TO 1877 or</td>
<td>3</td>
</tr>
<tr>
<td>HIS-152</td>
<td>US HISTORY SINCE 1877 or</td>
<td>3</td>
</tr>
<tr>
<td>PHI-101</td>
<td>INTRODUCTION TO PHILOSOPHY or</td>
<td>3</td>
</tr>
<tr>
<td>PHI-105</td>
<td>INTRODUCTION TO ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>BIO-105</td>
<td>INTRODUCTORY BIOLOGY or</td>
<td>4</td>
</tr>
<tr>
<td>ENV-111</td>
<td>ENVIRONMENTAL SCIENCE or</td>
<td>4</td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHS-151</td>
<td>INTRODUCTION TO ASTRONOMY</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total...................................................................................................... 64-66

Where will this take me?

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

Instructor and Staff

Jeron Lindsay
Instructor
(319) 524-3221 ext. 1937
jlindsay@scciowa.edu

Jason Radel
Instructor
(319) 524-3221 ext. 1990
jradel@scciowa.edu

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Interactive & Social Media Marketing - AAS

The Interactive & Social Media Marketing program prepares students with the necessary skills and knowledge to begin working in various prepress/premedia 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 preflighting.

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.

**West Burlington Campus**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester I</td>
<td>CSC-110</td>
<td>INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ENG-105</td>
<td>COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRA-137</td>
<td>DIGITAL DESIGN</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRA-175</td>
<td>GRAPHIC DESIGN PRINCIPLES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SMM-108</td>
<td>SOCIAL MEDIA ENGAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT-110</td>
<td>MATH FOR LIBERAL ARTS or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MAT-156</td>
<td>STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester I</td>
<td>ART-184</td>
<td>PHOTOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRA-275</td>
<td>ADVANCED GRAPHIC DESIGN</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKT-121</td>
<td>DIGITAL MARKETING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MMS-111</td>
<td>VIDEO PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>WDV-101</td>
<td>INTRODUCTION TO HTML AND CSS</td>
<td>3</td>
</tr>
<tr>
<td>Summer Semester</td>
<td>BUS-140</td>
<td>SMALL BUSINESS START-UP (ONLINE ONLY)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Semester II</td>
<td>GRA-140</td>
<td>DIGITAL IMAGING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRA-173</td>
<td>TYPOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MKT-150</td>
<td>PRINCIPLES OF ADVERTISING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SMM-220</td>
<td>NAVIGATING THE MEDIA MINEFIELD</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC-115</td>
<td>SOCIAL PROBLEMS or</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SOC-120</td>
<td>MARRIAGE AND FAMILY</td>
<td>3</td>
</tr>
<tr>
<td>Spring Semester II</td>
<td>GRA-127</td>
<td>ILLUSTRATOR I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRA-158</td>
<td>WEB MULTIMEDIA</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRA-166</td>
<td>WEB ANIMATIONS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRA-190</td>
<td>ELECTRONIC MEDIA PROJECTS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>GRA-933</td>
<td>INTERNSHIP</td>
<td>4</td>
</tr>
</tbody>
</table>

Program Total: 69-69

**Where will this take me?**

Graphic Designer  
Marketing Assistant  
Typographer

Southeastern Community College values diversity in all its forms. Please visit [http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf](http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf) to view our nondiscrimination statement. 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](http://www.scciowa.edu/admissions/costaid/finaid/gainemp.aspx)
Admissions standards apply to this program. Please contact the Enrollment Services for more details.

A) ACT reading score of 19 or ACCUPLACER reading score of 73.
B) ACT numerical score of 19 or ALEKS math score of 14 or higher.
C) 35 net words per minute on a typing test.
D) Standardized placement scores must be current (completed within 24 months) at 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.

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.

**West Burlington Campus**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-163</td>
<td>ESSENTIALS OF ANATOMY AND PHYSIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>HSC-114</td>
<td>MEDICAL TERMINOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>MAP-121</td>
<td>ADMINISTRATIVE PROCEDURES I: MEDICAL OFFICE</td>
<td>4</td>
</tr>
<tr>
<td>MAP-139</td>
<td>INTRODUCTION TO ELECTRONIC HEALTH RECORDS</td>
<td>2</td>
</tr>
<tr>
<td>MAP-364</td>
<td>CLINICAL PROCEDURES FOR MEDICAL OFFICE I</td>
<td>7</td>
</tr>
<tr>
<td>MAP-431</td>
<td>HUMAN RELATIONS</td>
<td>1</td>
</tr>
<tr>
<td>HIT-211</td>
<td>BASIC MEDICAL INSURANCE &amp; CODING</td>
<td>3</td>
</tr>
<tr>
<td>MAP-122</td>
<td>ADMINISTRATIVE PROCEDURES II: MEDICAL OFFICE</td>
<td>3</td>
</tr>
<tr>
<td>MAP-369</td>
<td>CLINICAL PROCEDURES FOR MEDICAL OFFICE II</td>
<td>7</td>
</tr>
<tr>
<td>MAP-370</td>
<td>SPECIALTY PROCEDURES</td>
<td>4</td>
</tr>
<tr>
<td>MAP-401</td>
<td>MEDICAL LAW AND ETHICS</td>
<td>1</td>
</tr>
<tr>
<td>MAP-532</td>
<td>HUMAN BODY: HEALTH AND DISEASE</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring Semester I**  
**Spring Semester I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAP-602</td>
<td>CLINICAL EXTERNSHIP SEMINAR</td>
<td>1</td>
</tr>
<tr>
<td>MAP-615</td>
<td>CLINICAL EXTERNSHIP</td>
<td>5</td>
</tr>
</tbody>
</table>

Program Total .................................................................................. 48-48

**Where will this take me?**

Medical Assistant  
Medical Records Manager  
Medical Secretary

**Instructor and Staff**

Megan Massner  
Instructor  
(319) 208-5000 ext. 5203

mmassner@scciowa.edu  
Diploma, Southeastern Community College

Carla Pilkington  
Assistant Professor  
(319) 524-3221 ext. 1986  
epilkington@scciowa.edu  
AA, Southeastern Community College  
BA, Buena Vista University

Deb Shaffer  
Instructor  
(319) 208-5000 ext. 5213  
dshaffer@scciowa.edu  
AAS, Mt. St. Clare College  
ADN, Southeastern Community College

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Medical Coding and Billing - Provider Emphasis

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

A) ACT reading score of 19 or ACCUPLACER reading score of 73.
B) ACT numerical score of 17 or ALEKS score of 14 or higher.
C) Students will be required to achieve a 35wpm typing test.
D) Satisfy "Iowa Core Performance Standards".
E) Standardized placement scores must be current (completed within 24 months) at time of enrollment.
F) Must successfully complete a course in Anatomy and Physiology Essentials with a grade of "C" 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.

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.

West Burlington Campus

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-163</td>
<td>4</td>
</tr>
<tr>
<td>ESSENTIALS OF ANATOMY AND PHYSIOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPC-110</td>
<td>2</td>
</tr>
<tr>
<td>ESSENTIALS OF MEDICAL CODING AND BILLING</td>
<td></td>
</tr>
<tr>
<td>CPC-121</td>
<td>5.5</td>
</tr>
<tr>
<td>INTRODUCTION TO MEDICAL PROCEDURAL CODING</td>
<td></td>
</tr>
<tr>
<td>CPC-126</td>
<td>4</td>
</tr>
<tr>
<td>DIAGNOSTIC CODING</td>
<td></td>
</tr>
<tr>
<td>CPC-128</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION TO MEDICAL INSURANCE &amp; BILLING</td>
<td></td>
</tr>
<tr>
<td>HSC-114</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL TERMINOLOGY</td>
<td></td>
</tr>
</tbody>
</table>

Spring Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPC-131</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL INSURANCE AND BILLING II</td>
<td></td>
</tr>
<tr>
<td>CPC-150</td>
<td>3</td>
</tr>
<tr>
<td>MEDICAL PROCEDURAL CODING</td>
<td></td>
</tr>
<tr>
<td>CPC-160</td>
<td>2</td>
</tr>
<tr>
<td>APPLICATIONS OF PROCEDURAL CODING</td>
<td></td>
</tr>
<tr>
<td>ENG-131</td>
<td>3</td>
</tr>
<tr>
<td>BUSINESS ENGLISH</td>
<td></td>
</tr>
<tr>
<td>MAP-401</td>
<td>1</td>
</tr>
<tr>
<td>MEDICAL LAW AND ETHICS</td>
<td></td>
</tr>
<tr>
<td>MAP-431</td>
<td>1</td>
</tr>
<tr>
<td>HUMAN RELATIONS</td>
<td></td>
</tr>
<tr>
<td>MAP-532</td>
<td>3</td>
</tr>
<tr>
<td>HUMAN BODY: HEALTH AND DISEASE</td>
<td></td>
</tr>
</tbody>
</table>

Summer Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPC-810</td>
<td>2.5</td>
</tr>
<tr>
<td>MEDICAL CODING AND BILLING EXTERNSHIP</td>
<td></td>
</tr>
<tr>
<td>CPC-945</td>
<td>1</td>
</tr>
<tr>
<td>MEDICAL CODING AND BILLING SEMINAR</td>
<td></td>
</tr>
</tbody>
</table>

Program Total.............................................................. 41-41

Where will this take me?

Medical Insurance Claims Adjuster
Medical Insurance Salesperson
Medical Records Manager
Medical Secretary
Medical Transcription

Instructor and Staff

Megan Massner
Instructor
(319) 208-5000 ext. 5203
mmassner@scciowa.edu
Diploma, Southeastern Community College

Carla Pilkington
Assistant Professor
(319) 524-3221 ext. 1986
cpilkington@scciowa.edu
AA, Southeastern Community College
BA, Buena Vista University

Deb Shaffer
Instructor
(319) 208-5000 ext. 5213
dshaffer@scciowa.edu
AAS, Mt. St. Clare College
ADN, Southeastern Community College

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Medical Scribe-Certificate

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

A) ACT reading score of 19 or ACCUPLACER reading score of 73.
B) ACT numerical score of 19 or ALEKS math score of 14 or higher.
C) Students will be required to achieve a 35wpm typing test.
D) Satisfy "Iowa Core Performance Standards".
E) Standardized placement scores must be current (completed within 24 months) at 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 immunizations.

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.

West Burlington Campus (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-163 ESSENTIALS OF ANATOMY AND PHYSIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>HSC-114 MEDICAL TERMINOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>MAP-401 MEDICAL LAW AND ETHICS</td>
<td>1</td>
</tr>
<tr>
<td>MAP-431 HUMAN RELATIONS</td>
<td>1</td>
</tr>
<tr>
<td>MTR-158 INTRODUCTION TO MEDICAL SCRIBE</td>
<td>7</td>
</tr>
<tr>
<td><strong>Program Total</strong></td>
<td><strong>16-16</strong></td>
</tr>
</tbody>
</table>

Where will this take me?

Medical Scribe in a Physician's Office/Clinic
Medical Scribe in an Emergency Room
Medical Scribe in a Hospital Setting

Instructor and Staff

Megan Massner
Instructor
(319) 208-5000 ext. 5203
mmassner@scciowa.edu
Diploma, Southeastern Community College

Carla Pilkington
Assistant Professor
(319) 524-3221 ext. 1986
cpilkington@scciowa.edu
AA, Southeastern Community College
BA, Buena Vista University

Deb Shaffer
Instructor
(319) 208-5000 ext. 5213
dshaffer@scciowa.edu
AAS, Mt. St. Clare College
ADN, Southeastern Community College

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Modern Food Production, Agriculture and the Environment - AAS, Diploma and Certificate

After successful completion of the first semester, the Modern Food Production Certificate will be awarded.

After successful completion of the first two semesters the Introduction to Modern Food Production, Agriculture & The Environment Diploma will be awarded.

In Spring I semester students must take at least 9 credit hours from the elective grouping AGA-367, AGB-331, AGC-420, AGM-157, AGS-225, and AGS-226.

In Fall II semester, students must take at least 6 credit hours from the elective grouping AGA-158, AGA-211, AGB-437, AGB-466, AGC-937, AGH-112, AGN-130, AGS-270, AGS-319, AGS-331 and AGT-250.

In Spring II semester, students must take at least 6 credit hours from each of the two elective groups.

West Burlington Campus

Fall Semester I
- AGB-336 AGRICULTURAL SELLING 3
- AGB-216 CAREER SEMINAR 2
- AGA-114 PRINCIPLES OF AGRONOMY or 3
- AGB-235 INTRODUCTION TO AGRICULTURE MARKETS or 3
- BUS-102 INTRODUCTION TO BUSINESS 3
- AGH-131 GREENHOUSE MANAGEMENT (online) or 3
- AGS-113 SURVEY OF THE ANIMAL INDUSTRY 3
- AGP-329 INTRODUCTION TO GPS or 3
- DRF-113 FUNDAMENTALS OF TECHNICAL DRAFTING 3

Spring Semester I
- AGA-154 FUNDAMENTALS OF SOIL SCIENCE 3
- AGA-390 INTRODUCTION TO RENEWABLE RESOURCES 3
- AGA-376 INTEGRATED PEST MANAGEMENT or 3
- AGS-331 ENTREPRENEURSHIP IN AGRICULTURE (online) or 3
- AGC-420 ISSUES IN AGRICULTURE or 3
- AGM-157 MACHINERY MANAGEMENT or 3
- AGS-225 SWINE SCIENCE or 3
- AGS-226 BEEF CATTLE SCIENCE 3
- ENG-105 COMPOSITION I or 3
- ENG-111 TECHNICAL WRITING (online) or 3
- SPC-112 PUBLIC SPEAKING 3

Summer Semester
- AGC-936 OCCUPATIONAL EXPERIENCE 3
- MAT-127 COLLEGE ALGEBRA AND TRIGONOMETRY or 5
- MAT-156 STATISTICS or 3
- MAT-702 INTRODUCTION TO MATH APPLICATIONS 3

Fall Semester II
- AGB-330 FARM BUSINESS MANAGEMENT 3
- AGB-470 FARM RECORDS, ACCOUNTS, ANALYSIS 3
- AGA-158 SOIL FERTILITY or 3

Fall Semester II
- AGA-211 GRAIN AND FORAGE CROPS or 3
- AGB-437 COMMODITY MARKETING or 3
- AGB-466 AGRICULTURAL FINANCE (online) or 3
- AGC-937 OCCUPATIONAL EXPERIENCE II or 3
- AGH-112 INTRODUCTION TO TURF GRASS MANAGEMENT or 3
- AGN-130 SOIL AND WATER CONSERVATION or 3
- AGS-270 FOODS OF ANIMAL ORIGIN (online) or 3
- AGS-319 ANIMAL NUTRITION (online) or 3
- AGS-331 ANIMAL REPRODUCTION (online) or 3
- AGT-250 FOOD AND BIOSECURITY ISSUES (online) 1
- MAT-110 MATH FOR LIBERAL ARTS or 3
- MAT-127 COLLEGE ALGEBRA AND TRIGONOMETRY or 5
- MAT-156 STATISTICS or 3
- MAT-702 INTRODUCTION TO MATH or 3
- PHS-165 INTRODUCTION TO METEOROLOGY or 3
- PHY-106 SURVEY OF PHYSICS 4

Spring Semester II
- AGB-210 AGRICULTURE LAW (online) or 2
- AGH-260 FRUITS AND VEGETABLES or 3
- AGM-155 FARM EQUIPMENT MANAGEMENT (online) or 2
- AGM-203 AGRICULTURAL WELDING or 2
- AGN-244 WILDLIFE MANAGEMENT or 3
- AGS-216 EQUINE SCIENCE or 3
- AGS-242 ANIMAL HEALTH (online) or 3
- ELE-130 HOME AND FARM ELECTRICITY or 2
- ENV-145 CONSERVATION BIOLOGY (online) 4
- ECN-130 PRINCIPLES OF MICROECONOMICS or 3
- HUM-287 LEADERSHIP DEVELOPMENT STUDIES or 3
- PSY-102 HUMAN AND WORK RELATIONS or 3
- PSY-111 INTRODUCTION TO PSYCHOLOGY or 3
- SOC-110 INTRODUCTION TO SOCIOLOGY or 3
- SOC-114 CONFLICT RESOLUTION IN THE WORKPLACE 3

Program Total........................................................................ 68-76
Where will this take me?

Animal Science Technician
Farm and/or Feedlot Owner/Operator
Fruit and Vegetable Grower
Grain and/or Livestock Farmer
Livestock Breeding Manager
Specialty Animal Producer

Instructor and Staff

Sabrina Pidgeon
Assistant Professor
(319) 208-5000 ext. 5104
spidgeon@scciowa.edu
BS, Iowa State University

Adam Raub
Professor
(319) 208-5000 ext. 5103
araub@scciowa.edu
BS, Western Illinois University
MBA, St. Ambrose University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Network Administration and Cyber Security

During the second semester, students will take NET-101, IT Fundamentals where they have the opportunity to take CompTIA IT Fundamentals certification. At the end of the second semester, students will be eligible to receive the IT Technician Diploma.

Students will also take NET-153, Advanced Networking during the second year, which includes the CIW Network Technology Associates exam. Those who pass will receive the CIW NTA certificate.

West Burlington Campus

Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS-125</td>
<td>INTRODUCTION TO PROGRAMMING LOGIC WITH LANGUAGE</td>
<td>3</td>
</tr>
<tr>
<td>CSC-110</td>
<td>INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>NET-122</td>
<td>COMPUTER HARDWARE BASICS</td>
<td>3</td>
</tr>
<tr>
<td>NET-142</td>
<td>NETWORK ESSENTIALS</td>
<td>3</td>
</tr>
<tr>
<td>NET-442</td>
<td>LINUX OPERATING SYSTEM</td>
<td>3</td>
</tr>
<tr>
<td>MAT-702</td>
<td>INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>MAT-772</td>
<td>APPLIED MATH (ONLINE ONLY)</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS-504</td>
<td>STRUCTURED SYSTEMS ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>NET-101</td>
<td>IT FUNDAMENTALS</td>
<td>1</td>
</tr>
<tr>
<td>NET-310</td>
<td>VIRTUAL MACHINES</td>
<td>3</td>
</tr>
<tr>
<td>NET-314</td>
<td>WINDOWS SERVER</td>
<td>4</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I or</td>
<td>3</td>
</tr>
<tr>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
<tr>
<td>HUM-287</td>
<td>LEADERSHIP DEVELOPMENT STUDIES</td>
<td>3</td>
</tr>
<tr>
<td>SOC-114</td>
<td>CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
</tbody>
</table>

Fall Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-203</td>
<td>PROFESSIONAL DEVELOPMENT</td>
<td>2</td>
</tr>
<tr>
<td>CFR-100</td>
<td>INTRODUCTION TO COMPUTER FORENSICS</td>
<td>3</td>
</tr>
<tr>
<td>NET-637</td>
<td>NETWORK INTRUSION INVESTIGATION</td>
<td>3</td>
</tr>
<tr>
<td>NET-716</td>
<td>DATABASE ADMINISTRATION/SERVICE APPLICATION</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY or</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110</td>
<td>INTRODUCTION TO SOCIOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Spring Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS-810</td>
<td>EMERGING TECHNOLOGIES SEMINAR</td>
<td>1</td>
</tr>
<tr>
<td>NET-153</td>
<td>ADVANCED NETWORKING</td>
<td>4</td>
</tr>
<tr>
<td>NET-717</td>
<td>EMAIL APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>NET-820</td>
<td>NETWORK INTERNETSHIP</td>
<td>3.7</td>
</tr>
<tr>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total.........................................................63.7-63.7

Where will this take me?

Network Administrator
Network Technician
Network Installer

Instructor and Staff

Brenda Wamsley

Assistant Professor
(319) 208-5000 ext. 5195
bwamsley@scciowa.edu
Diploma, Indian Hills Community College
AAS, Southeastern Community College
BGS, Western Illinois University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Nursing - Practical Nursing and Associate Nursing Degree

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

A) High school diploma or equivalency.
B) ACT reading score of 19 or ACCUPLACER reading score of 73.
C) ACT numerical score of 18 or ALEKS math score of 14 or higher.
D) ACT English score of 17 (or composite of 20) or ACCUPLACER sentence skills of 82.
E) Standardized placement scores must be current (completed within 24 months) at time of enrollment.
F) BIO-168 Human Anatomy and Physiology I with a grade of C or better.
G) BIO-173 Human Anatomy and Physiology II with a grade of C or better.

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

A) Students will be required to pass a mandatory background check and drug screening.
B) Active LPN licensure-unrestricted.
C) Students will be required to submit (at their own expense) a completed physical examination form and immunizations for health care providers.
D) Current Iowa Certification as a Certified Nursing Assistant**.
E) Current certification in CPR-Basic Life Support for Healthcare Providers**.
F) Current certification in Mandatory Reporter-Adult & Child Abuse**.
G) Signed Confidentiality Agreement.

**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.

Practical Nursing Diploma will be awarded after successful completion of the first three semesters.

View Program Outcome and Accreditation information at https://nursing.iowa.gov/

West Burlington Campus (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Credit</th>
<th>Spring Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-168 HUMAN ANATOMY AND PHYSIOLOGY I</td>
<td>4</td>
<td>ADN-311 RN ISSUES AND TRENDS</td>
<td>1</td>
</tr>
<tr>
<td>BIO-173 HUMAN ANATOMY AND PHYSIOLOGY II</td>
<td>4</td>
<td>ADN-642 NURSING IV</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Program Total.................................................. 86-86</td>
<td></td>
</tr>
</tbody>
</table>

Where will this take me?
Registered Nurse
Licensed Practical Nurse
Informatics Nurse Specialists
Acute Care Nurse

Instructor and Staff
Kristi Schroeder
Dean of Health Professions/Director of Nursing
(319) 208-5000 ext. 5100 (WB) or (319) 524-3221 ext. 1979 (Keokuk)
kschroeder@scciowa.edu
RN, Augustana Hospital School of Nursing
BSN, University of Phoenix
MSN, University of Phoenix

Tiffany West
Clinical Coordinator-Nursing
(319) 208-5000 ext. 5218
twest@scciowa.edu
BSN, Luther College
MSN Ed., Western Governors University
Kimberly Hinson  
Assistant Professor-Nursing  
(319) 208-5000 ext. 5267  
hinson@scciowa.edu  
ADN, Southeastern Community College  
BSN, Western Governors University  
MSN Ed., Western Governors University  
CEN, Certified Emergency Nurse Certification

Leeanne Humiston  
Professor-Nursing  
(319) 524-3221 ext. 1981  
lhumiston@scciowa.edu  
ADN, Southeastern Community College  
BSN, Iowa Wesleyan College  
MSN Ed., Clarkson College

Deanna Kline  
Professor-Nursing  
(319) 524-3221 ext. 1980  
dkbline@scciowa.edu  
BSN, University of Nebraska Medical Center  
MSN Ed., Walden University  
CCRN, Critical Care Registered Nurse Certification

Tamika Miller  
Instructor-Nursing  
(319) 208-5000 ext. 5264  
tmiller@scciowa.edu  
ADN, Southeastern Community College  
BSN, Iowa Wesleyan College  
MSN Ed., University of Phoenix

Cole Roberts  
Professor-Nursing  
(319) 208-5000 ext. 5131  
croberts@scciowa.edu  
BSN, Iowa Wesleyan College  
MSN Ed., University of IA

Nancy Roed  
Associate Professor-Nursing  
(319) 208-5000 ext. 5223  
nroed@scciowa.edu  
LPN, Southwestern Community College  
ADN, Southeastern Community College  
BSN, Iowa Wesleyan College  
MSN Ed., Walden University

Trisha Thomann  
Associate Professor-Nursing  
(319) 208-5000 ext. 5206  
thomann@scciowa.edu  
BSN, St. Francis Medical Center College of Nursing  
MSN Ed., Walden University

Jeanie Titus  
Professor-Nursing  
(319) 208-5000 ext. 5260  
jtitus@scciowa.edu  
BSN, Iowa Wesleyan College

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Nurse Aide

This course is comprised of the state approved curriculum and laboratory module with the skills component. The class includes 32 hours of clinical training in a long term facility, 20 lab hours, and 36 hours lecture. Students must attend a minimum of 30 clinical hours and 15 lab hours in order to pass the class. The course also includes a module on confidentiality, professionalism, and communications. Clinical schedule will be arranged by the instructor and dates given the students on the first day of class and may include weekend hours.

West Burlington campus, Keokuk campus, Mt. Pleasant campus

Required Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC-168</td>
<td>NURSE AIDE</td>
</tr>
</tbody>
</table>

Program Total.................................................................3.5-3.5

Instructor and Staff

Kali Watson
Nurse Aid and Health Continuing Education Coordinator
(319) 208-5000 ext. 5102
kwatson@scciowa.edu
RN, Indian Hills
BSN, Kaplan University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
The Occupational Therapy Assistant Program is a 21-month (seven-term) program that prepares the student to become an Occupational Therapy Assistant (OTA). The occupational therapy assistant works with, and under the supervision of an occupational therapist, to improve and support functional performance in daily activities. OTAs, within their scope of practice, assist with the process of client evaluation, goal setting, implementation of care and documentation of occupational therapy services. Upon completion of the program, the associate degree graduate will be educationally prepared to provide service throughout the lifespan to individuals who have difficulties due to developmental, physical, cognitive and emotional impairments. After program completion, you will be eligible to take the national certification examination for occupational therapy assistants administered by the National Board for Certification in Occupational Therapy (NBCOT).

Indian Hills Community College will offer the award. This is a shared program between SCC and IHCC.

### West Burlington campus and Indian Hills Community College

(Keokuk campus offers select courses)

#### Term 1

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-168</td>
<td>HUMAN ANATOMY AND PHYSIOLOGY I</td>
<td>4</td>
</tr>
<tr>
<td>CSC-110</td>
<td>INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>HSC-114</td>
<td>MEDICAL TERMINOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>OTA-106</td>
<td>TRENDS IN OTA (INDIAN HILLS CC COURSE)</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Term 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-173</td>
<td>HUMAN ANATOMY AND PHYSIOLOGY II</td>
<td>4</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I</td>
<td>3</td>
</tr>
<tr>
<td>OTA-121</td>
<td>PRINCIPLES OF OT (INDIAN HILLS CC COURSE)</td>
<td>4</td>
</tr>
<tr>
<td>PSY-121</td>
<td>DEVELOPMENTAL PSYCHOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Term 3

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTA-131</td>
<td>PEDIATRIC PRACTICE FOR THE OTA (INDIAN HILLS CC COURSE)</td>
<td>4</td>
</tr>
<tr>
<td>OTA-141</td>
<td>THERAPEUTIC MEDIA IN OT (INDIAN HILLS CC COURSE)</td>
<td>3</td>
</tr>
<tr>
<td>OTA-212</td>
<td>FUNCTIONAL KINESIOLOGY (INDIAN HILLS CC COURSE)</td>
<td>3</td>
</tr>
<tr>
<td>OTA-801</td>
<td>OTA LEVEL IIA FIELDWORK (INDIAN HILLS CC COURSE)</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Term 4

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSC-212</td>
<td>PATHOPHYSIOLOGY (INDIAN HILLS CC COURSE)</td>
<td>3</td>
</tr>
<tr>
<td>OTA-151</td>
<td>ADULT PHYSICAL DISABILITY PRACTICE FOR THE OTA (INDIAN HILLS CC COURSE)</td>
<td>4</td>
</tr>
<tr>
<td>OTA-161</td>
<td>TRADITIONAL AND EMERGING PRACTICE IN OT (INDIAN HILLS CC COURSE)</td>
<td>2</td>
</tr>
<tr>
<td>OTA-811</td>
<td>OTA LEVEL IIB FIELDWORK (INDIAN HILLS CC COURSE)</td>
<td>1</td>
</tr>
<tr>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Term 5

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTA-171</td>
<td>PSYCHOSOCIAL PRACTICE FOR THE OTA (INDIAN HILLS CC COURSE)</td>
<td>3</td>
</tr>
<tr>
<td>OTA-821</td>
<td>OTA LEVEL IIC FIELDWORK (INDIAN HILLS CC COURSE)</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Term 6

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTA-210</td>
<td>PROFESSIONAL ISSUES IN OT (INDIAN HILLS CC COURSE)</td>
<td>2</td>
</tr>
<tr>
<td>OTA-831</td>
<td>OTA LEVEL II A FIELDWORK (INDIAN HILLS CC COURSE)</td>
<td>6</td>
</tr>
</tbody>
</table>

#### Term 7

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTA-220</td>
<td>CLINICAL REASONING FOR OTA (INDIAN HILLS CC COURSE)</td>
<td>2</td>
</tr>
<tr>
<td>OTA-841</td>
<td>OTA LEVEL II B FIELDWORK (INDIAN HILLS CC COURSE)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Program Total**: 83-84

**Where will this take me?**

Occupational Therapy Aide  
Occupational Therapy Assistant

**Instructor and Staff**

Kristi Schroeder  
Dean of Health Professions/Director of Nursing  
(319) 208-5000 ext. 5100  
kschroeder@scciowa.edu  
RN, Augustana Hospital School of Nursing  
BSN, University of Phoenix  
MSN, University of Phoenix

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Pharmacy Technician-Diploma

The Pharmacy Technology program is a nine-month (three-term) program that begins in the Winter term each year. The program is offered in an online/hybrid format with traditional practicum, laboratory and simulation settings. Graduates are prepared to function as allied health professionals under the direction of a registered pharmacist in a hospital or retail pharmacy. Pharmacy Technicians are responsible for measuring, mixing, counting, labeling and recording amounts and dosages of medications; verifying prescriptions from physicians; and maintaining patient records and insurance information. Students will complete a required practicum experience in a hospital and/or retail pharmacy. Upon successful completion of the Pharmacy Technology program, students are awarded a diploma and are eligible to take the Pharmacy Technician Certification Examination.

Indian Hills Community College will offer the award. This is a shared program between SCC and IHCC.

West Burlington campus and Indian Hills Community College (Keokuk campus offers select courses)

<table>
<thead>
<tr>
<th>Term</th>
<th>Credit</th>
<th>Course and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-163</td>
<td>4</td>
<td>ESSENTIALS OF ANATOMY AND PHYSIOLOGY</td>
</tr>
<tr>
<td>PHR-100</td>
<td>3</td>
<td>INTRO TO PHARMACY TECHNICIAN (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>PHR-110</td>
<td>3</td>
<td>PHARMACY TECHNICIAN I (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>PHR-145</td>
<td>1</td>
<td>PHARMACY SIMULATION I (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>HSC-114</td>
<td>3</td>
<td>MEDICAL TERMINOLOGY</td>
</tr>
<tr>
<td>Term 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHR-115</td>
<td>5</td>
<td>PHARMACY TECHNICIAN II (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>PHR-130</td>
<td>1</td>
<td>PHARMACEUTICAL CALCULATIONS (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>HSC-212</td>
<td>3</td>
<td>PATHOPHYSIOLOGY (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>PHR-148</td>
<td>1</td>
<td>PHARMACY SIMULATION II (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>PHR-141</td>
<td>3</td>
<td>PHARMACY OPERATIONS (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>HSC-230</td>
<td>1</td>
<td>EMPLOYMENT PREPARATION (INDIAN HILLS CC COURSE)</td>
</tr>
<tr>
<td>Term 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHR-150</td>
<td>2</td>
<td>PHARMACY TECHNICIAN PRACTICUM (INDIAN HILLS CC COURSE)</td>
</tr>
</tbody>
</table>

Program Total.......................................................... 30-30

Where will this take me?

Hospital Pharmacy Technician
Drug Store Pharmacy Technician

Instructor and Staff

Kristi Schroeder
Dean of Health Professions/Director of Nursing
(319) 208-5000 ext. 5180 or (319) 524-3221 ext. 1979
kschroeder@scciowa.edu
RN, Augustana Hospital School of Nursing
BSN, University of Phoenix
MSN, University of Phoenix

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Admission standards apply to this program. Please contact Enrollment Services for more details.

A) ACT reading score of 19 or ACCUPLACER reading score of 73 and sentence skills of 82.
B) ACT math score of 18 or ALEKS math score of 14 or higher.
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) Standardized placement scores must be current (completed within 24 months) at time of enrollment.
E) 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 ACT composite of 20.

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

A) Students will be required to pass a mandatory background check and drug screening.
B) Students will be required to submit (at their own expense) a completed physical examination form and immunizations.
C) Current certification in CPR-Basic Life Support for Healthcare Providers**.
D) Current certification in Mandatory Reporter-Adult & Child Abuse**.
E) Signed Confidentiality Agreement.
F) Proof of health insurance.

**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.

**All courses with an RCP designation must be taken at the West Burlington location. Other courses are available at West Burlington, Keokuk, and/or online.**

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th>Fall Semester I</th>
<th>Summer Semester</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO-186</td>
<td>MICROBIOLOGY</td>
<td>RCP-524</td>
<td>RESPIRATORY CARE III</td>
</tr>
<tr>
<td>CHM-122</td>
<td>INTRODUCTION TO GENERAL CHEMISTRY</td>
<td>RCP-755</td>
<td>RESPIRATORY CARE CLINIC II</td>
</tr>
<tr>
<td>HSC-114</td>
<td>MEDICAL TERMINOLOGY</td>
<td>RCP-440</td>
<td>CARDIO/PULMONARY DIAGNOSTICS</td>
</tr>
<tr>
<td>RCP-231</td>
<td>INTRODUCTION TO RESPIRATORY CARE</td>
<td>RCP-450</td>
<td>RESPIRATORY CARE IV</td>
</tr>
<tr>
<td>RCP-232</td>
<td>RESPIRATORY CARE MODALITIES</td>
<td>RCP-620</td>
<td>NEONATAL/PEDIATRIC RESPIRATORY CARE</td>
</tr>
<tr>
<td>RCP-233</td>
<td>INTRODUCTION TO CLINICAL PRACTICE</td>
<td>RCP-761</td>
<td>RESPIRATORY CARE CLINIC III</td>
</tr>
<tr>
<td>RCP-331</td>
<td>RESPIRATORY CARE II</td>
<td>RCP-767</td>
<td>RESPIRATORY CARE CLINIC IV</td>
</tr>
<tr>
<td>RCP-332</td>
<td>RESPIRATORY CARE MODALITIES II</td>
<td>RCP-810</td>
<td>RESPIRATORY CARE PROFESSIONAL</td>
</tr>
<tr>
<td>RCP-333</td>
<td>CARDIOPULMONARY PHARMACOLOGY</td>
<td>RCP-910</td>
<td>RESPIRATORY CARE RRT REVIEW</td>
</tr>
<tr>
<td>RCP-350</td>
<td>PULMONARY PATHOLOGY</td>
<td>Program Total...</td>
<td>...............................</td>
</tr>
<tr>
<td>RCP-751</td>
<td>RESPIRATORY CARE CLINIC I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPC-101</td>
<td>FUNDAMENTALS OF ORAL COMMUNICATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Summer Semester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY-111</td>
<td>INTRODUCTION TO PSYCHOLOGY</td>
<td>RCP-470</td>
<td>CARDIAC MONITORING</td>
</tr>
</tbody>
</table>

Where will this take me?

Respiratory Therapist
Respiratory Therapy Technician

Instructor and Staff

Christina Carter
Instructor
(319) 752-2731 ext. 5214
carter@scciowa.edu
AAS, Southeastern Community College
BA, University of the Pacific

Stacy Lewis-Sells
Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Information Technology - Web Design & Development - Diploma and AAS

After successful completion of the first three semesters the Web Design Diploma will be awarded.

**West Burlington Campus**

**Fall Semester I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC-110</td>
<td>INTRODUCTION TO COMPUTERS</td>
<td>3</td>
</tr>
<tr>
<td>GRA-140</td>
<td>DIGITAL IMAGING</td>
<td>3</td>
</tr>
<tr>
<td>GRA-175</td>
<td>GRAPHIC DESIGN PRINCIPLES</td>
<td>3</td>
</tr>
<tr>
<td>SMM-108</td>
<td>SOCIAL MEDIA ENGAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I or</td>
<td>3</td>
</tr>
<tr>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring Semester I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRA-158</td>
<td>WEB MULTIMEDIA</td>
<td>3</td>
</tr>
<tr>
<td>GRA-166</td>
<td>WEB ANIMATIONS</td>
<td>3</td>
</tr>
<tr>
<td>HUM-114</td>
<td>MULTICULTURAL PERSPECTIVES</td>
<td>3</td>
</tr>
<tr>
<td>MKT-121</td>
<td>DIGITAL MARKETING</td>
<td>3</td>
</tr>
<tr>
<td>WDV-101</td>
<td>INTRODUCTION TO HTML AND CSS</td>
<td>3</td>
</tr>
<tr>
<td>ART-120</td>
<td>2-D DESIGN or</td>
<td>3</td>
</tr>
<tr>
<td>ART-133</td>
<td>DRAWING or</td>
<td>3</td>
</tr>
<tr>
<td>ART-186</td>
<td>DIGITAL PHOTOGRAPHY or</td>
<td>3</td>
</tr>
<tr>
<td>ENG-221</td>
<td>CREATIVE WRITING</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summer Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT-702</td>
<td>INTRODUCTION TO MATH APPLICATIONS</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fall Semester II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS-125</td>
<td>INTRODUCTION TO PROGRAMMING LOGIC WITH LANGUAGE</td>
<td>3</td>
</tr>
<tr>
<td>CIS-332</td>
<td>DATABASE AND SQL</td>
<td>3</td>
</tr>
<tr>
<td>GRA-299</td>
<td>ELECTRONIC PORTFOLIO</td>
<td>3</td>
</tr>
<tr>
<td>NET-142</td>
<td>NETWORK ESSENTIALS</td>
<td>3</td>
</tr>
<tr>
<td>WDV-120</td>
<td>INTERFACE DESIGN</td>
<td>3</td>
</tr>
</tbody>
</table>

**Spring Semester II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS-150</td>
<td>E-COMMERCE</td>
<td>3</td>
</tr>
<tr>
<td>NET-825</td>
<td>INTERNET/WEB INTERNSHIP</td>
<td>3.7</td>
</tr>
<tr>
<td>WDV-132</td>
<td>MOBILE APPLICATION DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>WDV-341</td>
<td>INTRODUCTION TO PHP</td>
<td>3</td>
</tr>
<tr>
<td>ART-120</td>
<td>2-D DESIGN or</td>
<td>3</td>
</tr>
<tr>
<td>ART-133</td>
<td>DRAWING or</td>
<td>3</td>
</tr>
<tr>
<td>ART-186</td>
<td>DIGITAL PHOTOGRAPHY or</td>
<td>3</td>
</tr>
<tr>
<td>ENG-105</td>
<td>COMPOSITION I or</td>
<td>3</td>
</tr>
<tr>
<td>ENG-111</td>
<td>TECHNICAL WRITING (online) or</td>
<td>3</td>
</tr>
<tr>
<td>ENG-221</td>
<td>CREATIVE WRITING or</td>
<td>3</td>
</tr>
<tr>
<td>SPC-112</td>
<td>PUBLIC SPEAKING</td>
<td>3</td>
</tr>
</tbody>
</table>

Program Total........................................................................... 66.7-66.7

Where will this take me?

Web Developer
Web Site Administrator
Webmaster

Instructor and Staff

Don Weiss
Dean of Career and Technical Education
(319) 208-5000 ext. 5380
dweiss@scciowa.edu
BA, University of Kansas
MBA, Keller Graduate School
PhD, St. Louis University

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement. 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
Many welding courses are available to enroll in at times other than the traditional term dates. Please refer to the "Enrollment Options" section.

Welding Diploma awarded after successful completion of first two semesters.

Basic Welding Processes Certificate awarded after successful completion of WEL-192, WEL-186, WEL-160 and WEL-111.

Advanced Welding Processes Certificate awarded after earning the prior certificate and successful completion of WEL-130, WEL-197, WEL-164, WEL-172 and MAT-702.


**West Burlington Campus**

<table>
<thead>
<tr>
<th>Fall Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT-702  INTRODUCTION TO MATH</td>
<td>3</td>
</tr>
<tr>
<td>WEL-111  WELDING BLUEPRINT READING</td>
<td>3</td>
</tr>
<tr>
<td>WEL-160  ARC WELDING I (SMAW)</td>
<td>5</td>
</tr>
<tr>
<td>WEL-186  GAS METAL ARC WELDING</td>
<td>4</td>
</tr>
<tr>
<td>WEL-192  GAS TUNGSTEN ARC WELDING</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester I</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-111  TECHNICAL WRITING (online)</td>
<td>3</td>
</tr>
<tr>
<td>WEL-130  OXYACETYLENE WELDING</td>
<td>2</td>
</tr>
<tr>
<td>WEL-164  ARC WELDING II (SMAW)</td>
<td>4</td>
</tr>
<tr>
<td>WEL-172  ADVANCED SHIELDED METAL ARC WELDING II</td>
<td>4</td>
</tr>
<tr>
<td>WEL-197  GAS TUNGSTEN ARC WELDING - TUBE</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer Semester</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC-115  SOCIAL PROBLEMS</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fall Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRF-113  FUNDAMENTALS OF TECHNICAL DRAFTING</td>
<td>3</td>
</tr>
<tr>
<td>SDV-125  WORKPLACE READINESS</td>
<td>1</td>
</tr>
<tr>
<td>SOC-114  CONFLICT RESOLUTION IN THE WORKPLACE</td>
<td>3</td>
</tr>
<tr>
<td>WEL-182  FLUX CORED ARC WELDING</td>
<td>2</td>
</tr>
<tr>
<td>WEL-198  ADVANCED GAS METAL ARC WELDING - ALUMINUM</td>
<td>2</td>
</tr>
<tr>
<td>WEL-292  PIPE WELDING/SMAW - UPHILL</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Semester II</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGT-130  PRINCIPLES OF SUPERVISION</td>
<td>3</td>
</tr>
<tr>
<td>PSY-102  HUMAN AND WORK RELATIONS</td>
<td>3</td>
</tr>
<tr>
<td>WEL-235  LAYOUT &amp; FABRICATION</td>
<td>4</td>
</tr>
<tr>
<td>WEL-720  INTRODUCTION TO ROBOTIC ARC WELDING</td>
<td>2</td>
</tr>
</tbody>
</table>

Program Total......................................................... 65-65

**Where will this take me?**

Construction Welder
Industrial Welder
Maintenance Welder
### ALEKS Math Placement Chart

<table>
<thead>
<tr>
<th>Range (%)</th>
<th>Course Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 13</td>
<td>Basic Math/Pre-Algebra MAT-052</td>
</tr>
<tr>
<td>14-29</td>
<td>Elementary Algebra MAT-062</td>
</tr>
<tr>
<td></td>
<td>Intro to Math Applications MAT-702</td>
</tr>
<tr>
<td>30-45</td>
<td>Intermediate Algebra MAT-092</td>
</tr>
<tr>
<td></td>
<td>Math for Liberal Arts MAT-110</td>
</tr>
<tr>
<td></td>
<td>Math for Elementary Teachers MAT-112/113</td>
</tr>
<tr>
<td></td>
<td>Math Applications MAT-704</td>
</tr>
<tr>
<td>46-60</td>
<td>College Algebra &amp; Trig MAT-127</td>
</tr>
<tr>
<td></td>
<td>Finite Math MAT-140</td>
</tr>
<tr>
<td></td>
<td>Statistics MAT-156</td>
</tr>
<tr>
<td>61-75</td>
<td>Pre-Calculus MAT-128</td>
</tr>
<tr>
<td></td>
<td>Business Calculus MAT-165</td>
</tr>
<tr>
<td>76-100</td>
<td>Calculus I MAT-210</td>
</tr>
</tbody>
</table>

### ESL Course Placement Chart

<table>
<thead>
<tr>
<th>Accuplacer Score</th>
<th>ESL Course Level Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 or below</td>
<td>Level I</td>
</tr>
<tr>
<td>61-70</td>
<td>Level II</td>
</tr>
<tr>
<td>71-80</td>
<td>Level III</td>
</tr>
<tr>
<td>81-90</td>
<td>Level IV</td>
</tr>
<tr>
<td>91 or above</td>
<td>Level V</td>
</tr>
<tr>
<td>Score Range</td>
<td>Score Range</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>20-39</td>
<td>1-5</td>
</tr>
<tr>
<td>40-59</td>
<td>6-11</td>
</tr>
<tr>
<td>60-79</td>
<td>12-15</td>
</tr>
<tr>
<td>80-99</td>
<td>16-19</td>
</tr>
<tr>
<td>100-120</td>
<td>20-36</td>
</tr>
</tbody>
</table>
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

ECE.......................................................... 66
ECN.......................................................... 66
EDU.......................................................... 66
EGR.......................................................... 66
EGT.......................................................... 66
ELE.......................................................... 67
ELT.......................................................... 67
EMS.......................................................... 69
ENG.......................................................... 70
ENV.......................................................... 70
ESL.......................................................... 70
ESL.......................................................... 71
FIN.......................................................... 72
FLF.......................................................... 72
FLG.......................................................... 72
FLS.......................................................... 73
GEO.......................................................... 73
GRA.......................................................... 73
HEQ.......................................................... 74
HIS.......................................................... 74
HSC.......................................................... 75
HSV.......................................................... 75
HUM.......................................................... 76
IND.......................................................... 76
LGL.......................................................... 77
LIT.......................................................... 77
MAP.......................................................... 77
MAT.......................................................... 78
MFG.......................................................... 80
MGT.......................................................... 81
MKT.......................................................... 81
MMS.......................................................... 81
MTR.......................................................... 81
MUA.......................................................... 82
MUS.......................................................... 82
NET.......................................................... 83
OTA.......................................................... 84
PEA.......................................................... 86
PEC.......................................................... 86
PEH.......................................................... 86
PET.......................................................... 86
PEV.......................................................... 86
PHI.......................................................... 87
PHR.......................................................... 87
PHS.......................................................... 88
PHY.......................................................... 88
PNN.......................................................... 88
POL.......................................................... 89
PRL.......................................................... 89
PSY.......................................................... 89
RCP.......................................................... 90
RDG.......................................................... 91
REL.......................................................... 91
SCI.......................................................... 91
SDV.......................................................... 92
SMM.......................................................... 92
SOC.......................................................... 92
SPC.......................................................... 93
WDV.......................................................... 93
WEL.......................................................... 94

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.
FINANCIAL ACCOUNTING
Lec 3  Credit 3
An introduction to financial accounting theory and practice with emphasis on the use and interpretation of financial statements.

ACC-146
MANAGERIAL ACCOUNTING
Lec 3  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
Lec 3  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.

ACC-231
INTERMEDIATE ACCOUNTING I
Lec 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.

ACC-232
INTERMEDIATE ACCOUNTING II
Lec 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
Lec 3  Credit 3
Coverage of income tax returns for individuals, including filing requirements, gross income inclusions and exclusions, dependency requirements, itemized deductions, etc.

ACC-332
COMPUTER ACCOUNTING - QUICKBOOKS
Lec 2  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.
OFFICE PROCEDURES
Lec 3  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
Lec 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-117 or CSC-110.

ADM-186 LEGAL DOCUMENTS
Lec 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-120, ADM-149.

ADM-198 LEGAL TERMINOLOGY
Lec 1  Lab 2  Credit 2
This course is a study of the basic terminology used in a legal office. Emphasis will be placed on legal terminology definitions and on a study of court cases that pertain to the topics being covered.

ADM-204 LEGAL OFFICE PROCEDURES
Lec 3  Credit 3
This course is an introduction to the career of Administrative Legal Professional based on the Basic Manual for the Lawyer's Assistant written by NALS, the association for legal professionals. Students consider career paths, study the court system, review communication skills, learn how to keep the law library current, and review ethical guidelines for legal office workers.

ADM-230 INTEGRATED OFFICE PROJECTS
Lec 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.

ADM-235 ADVANCED INTEGRATED OFFICE PROJECTS
Lec 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

Assume Degree Nursing (ADN)

ADN-145 ROLE TRANSITION
Lec 1  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. Prerequisites: PNN-160, PNN-220, PNN-311, PNN-534 and PNN-535.

ADN-221 PHARMACOLOGY II
Lec 2  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. Prerequisites: PNN-160, PNN-220, PNN-311, PNN-534 and PNN-535. Corequisite: ADN-145.

**ADN-311**  
**RN ISSUES AND TRENDS**  
Lec 1  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**  
Lec 8  Lab 1  Clinical Credit 18 14.5  
This course integrates concepts and strands 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**  
Lec 8  Clinical Credit 14 18  
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.

---

**Agronomy (AGA)**

**AGA-114**  
**PRINCIPLES OF AGRONOMY**  
Lec 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**  
Lec 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**  
Lec 3  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**  
Lec 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 and problem solving.

**AGA-376**  
**INTEGRATED PEST MANAGEMENT**  
Lec 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**  
Lec 3  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.

---

**Farm Management Business (AGB)**

**AGB-210**  
**AGRICULTURE LAW (ONLINE)**  
Lec 2  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**  
Lec 3  Credit 3  
A course dealing with supply and demand for Agricultural market products, food marketing channels, farm vs. retail pricing and quality and safety. This course also covers issues in market structures, problems for farmers and 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**  
Lec 3  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 (ONLINE)**  
Lec 3  Credit 3  
This course relates specifically to management of agriculture farms and businesses. Course content emphasizes budget planning, record keeping, record analysis, agricultural 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**  
*Lec 3  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**  
*Lec 3  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**  
**AGRICULTURAL FINANCE (ONLINE)**  
*Lec 3  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**  
*Lec 3  Credit 3*  
Emphasis is placed on the importance of records as an essential management tool.

**AGB-930**  
**AGRICULTURE SEMINAR**  
*Lec 1  Credit 1*  
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**  
*Lec 3  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**  
*Lec 0  OJT 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: AGB-420, AGB-437.

**AGC-937**  
**OCCUPATIONAL EXPERIENCE II**  
*Lec 0  OJT 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.

---

**Agricultural Mechanics (AGM)**

**AGM-151**  
**FARM EQUIPMENT ADJUSTMENT**  
*Lec 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 (ONLINE)**  
*Lec 2  Credit 2*  
This course deals with fitting farm equipment to the farming unit and the repair of farm equipment.

**AGM-157**  
**MACHINERY MANAGEMENT**  
*Lec 3  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.

**AGH-260**  
**FRUITS AND VEGETABLES**  
*Lec 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.

---

**Horticulture (AGH)**

**AGH-112**  
**INTRODUCTION TO TURF GRASS MANAGEMENT**  
*Lec 3  Credit 3*  
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 (ONLINE)**  
*Lec 3  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.

---

**Agricultural Miscellaneous (AGC)**

**AGC-216**  
**CAREER SEMINAR**
The course will take students into advanced concepts in GIS and give hands-on experience in the practical applications of a geographical information system.

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.

**Animal Science (AGS)**

**AGS-113**

**SURVEY OF THE ANIMAL INDUSTRY**

Lec 3  Credit 3

This 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**

Lec 3  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**

Lec 3  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.

**AGS-226**

**BEEF CATTLE SCIENCE**

Lec 3  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-242**

**ANIMAL HEALTH (ONLINE)**

Lec 3  Credit 3

Provides information about the cause, nature, prevention, and treatment of common health problems of farm animals.

**AGS-270**

**FOODS OF ANIMAL ORIGIN (ONLINE)**

Lec 3  Credit 3

This is 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 (ONLINE)**

Lec 3  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-331**

**ANIMAL REPRODUCTION (ONLINE)**

Lec 3  Credit 3

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.

**Veterinarian Technician (AGT)**

**AGT-250**

**FOOD AND BIOSECURITY ISSUES (ONLINE)**

Lec 1  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.
Animation (ANI)

ANI-100
STORY DEVELOPMENT FOR ANIMATION
Lec 3 Lab 2 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
Lec 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
Lec 2 Lab 2 Credit 3
Students will learn more advanced modeling & sculpting techniques to complete a low and hi-resolution character model. Students will also be introduced to basic lighting and compositing techniques. Prerequisites: ANI-101, ANI-116.

ANI-103
ANIMATION SOFTWARE III
Lec 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. Pre-requisite: ANI-102 Animation Software II

ANI-104
ANIMATION SOFTWARE IV
Lec 2 Lab 2 Credit 3
This course will provide students with an understanding of the visual effects and compositing workflows in animation.

ANI-105
ANIMATION PRINCIPLES AND TECHNIQUES
Lec 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, and 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
Lec 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 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
Lec 2 Lab 2 Credit 3
Students will be introduced to video equipment operation, techniques in video and stop motion production. Students will learn how to shoot and edit video. Students will also set lights and cameras for stop motion. Students will apply animation principles to arrive at their final product.

ANI-166
CAPSTONE AND DEMO REEL FOR ANIMATION

Lec 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.

ANI-210
INTERMEDIATE ANIMATION
Lec 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
Lec 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
INTERNSHIP
Lec 0 Lab 2 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
Lec 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
Lec 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.

 Architectural (ARC)

ARC-113
ARCHITECTURAL DRAFTING I
Lec 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.

ARC-129
RESIDENTIAL/LIGHT COMMERCIAL DRAFTING
Lec 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.

Art (ART)

ART-101
ART APPRECIATION
Lec 3 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-109
NON-WESTERN ART
Lec 3 Credit 3
A survey of art history from prehistoric to modern times of locations outside of Western civilization. Both period style and personal styles will be compared to the lifestyles of the area. Geographical emphases will be in Africa, Eastern and Southern Asia, Central and Native North America, South America and Australia. Class work will consist of discussion of art using slides, prints, videos, hands-on activities and field trips.

ART-120
2-D DESIGN
Lec 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
Lec 2 Lab 2 Credit 4
This beginning level 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
Lec 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
Lec 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
Lec 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.

ART-143
PAINTING
Lec 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
Lec 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
Lec 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
Lec 2 Lab 2 Credit 3
Introductory printing course with emphasis in basic printing techniques and processes. Printing proficiency in relief,
stencil and/or intaglio prints will be pursued.

**ART-173**  
**CERAMICS**  
**Lec 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**  
**Lec 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**  
**Lec 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**  
**Lec 3  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**  
**Lec 3  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**  
Lec 3  Credit 3  
Continuation of ART-203 from Renaissance to post-modern. Prerequisite: ART-203.

**ART-208**  
**INTRODUCTION TO NATIVE AMERICAN ART HISTORY**  
**Lec 3  Credit 3**  
This course is 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 will 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-928**  
**INDEPENDENT STUDY**  
**Lec 0  Lab 2-6  Credit 1-3**  
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 instructor. A minimum of 32 hours of laboratory effort is required for each semester hour of credit. May be repeated for up to nine (9) semester hours of credit. Prerequisites: Any three of the following: ART-120, ART-123, ART-133, ART-143, ART-134, ART-144, ART-173, ART-174 and permission of instructor.

**Automotive Technology (AUT)**

**AUT-106**  
**INTRODUCTION TO AUTOMOTIVE TECHNOLOGY**  
**Lec 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**  
**Lec 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**  
**Lec 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**  
**Lec 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**  
**www.scciowa.edu (319) 208-5000**
This course will build on the electrical theory into "hands-on" practice with proper procedures to diagnose and repair automotive electrical circuits and the science. How the basics are applied to electrical and electronic principles as a the theory and operation of basic components, operation and service.

This course will introduce to the student with an understanding of differentials, as well as the major parts of a manual transmission. Inspection, maintenance, lubrication, disassembly and reassembly will also be covered.

Lec Lab Credit
AUT-244 MANUAL DRIVETRAINS I 2 4 6
This course will look closely at automotive suspension systems, manual, power and four-wheel steering, and proper vehicle wheel alignment.

Lec Lab Credit
AUT-405 AUTOMOTIVE SUSPENSION AND STEERING 2 6 5
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.

Lec Lab Credit
AUT-505 AUTOMOTIVE BRAKE SYSTEMS 2 6 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: AUT-126.

Lec Lab Credit
AUT-610 AUTOMOTIVE ELECTRICAL I 2 4 4
This course will introduce 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.

Lec Lab Credit
AUT-625 AUTOMOTIVE ELECTRICAL II 4 8 8
This course will build on the electrical and electronic basics learned in AUT-610, Automotive Electrical I. The semiconductor 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.

Lec Lab Credit
AUT-700 AUTOMOTIVE HEATING AND AIR CONDITIONING 4 8 8
This course will cover heating, venting, and air conditioning theory, components and operation. Alternative refrigerants, retrofitting, troubleshooting and service procedures will also be covered.

Lec Lab Credit
AUT-800 ENGINE PERFORMANCE 4 8 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.

Lec OJT Credit
AUT-911 INTERNSHIP 0 16 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.

Lec Credit
BIO-105 INTRODUCTORY BIOLOGY 3 2 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.

Lec Lab Credit
BIO-112 GENERAL BIOLOGY I 3 2 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 or Corequisite: CHM-165.

Lec Lab Credit
BIO-113 GENERAL BIOLOGY II 3 2 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.

Lec Credit
BIO-138 FIELD ECOLOGY 2 2 3
A study of ecology and conservation using various resources but including "A Sand County Almanac" by Aldo Leopold in conjunction with both field and lab work.

Lec Credit
BIO-151 NUTRITION 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.

Lec Credit
BIO-157 HUMAN BIOLOGY 3
Introductory course that focuses on the chemistry, histology, organization and function of major human body systems. It
continues with a survey of human genetics, inheritance, evolution and ecology.

**BIO-163**
**ESSENTIALS OF ANATOMY AND PHYSIOLOGY**
Lec 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 courses BIO-168 and BIO-173.

**BIO-168**
**HUMAN ANATOMY AND PHYSIOLOGY I**
Lec 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 AND PHYSIOLOGY II**
Lec 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**
Lec 3  Lab 2  Credit 4
A study of microbial populations and their relationships to the human in health and disease.

**BIO-248**
**INTRODUCTION TO BIOSCIENCE TECHNOLOGY**
Lec 3  Lab 2  Credit 4
An exploration of the expanding field of biotechnology and how it impacts science and society. Fundamental biological, chemical, and mathematical principles as they apply to biotechnology are examined. Laboratory emphasizes essential methodologies employed in scientific inquiry and experimentation.

**BIO-252**
**BIOMOLECULAR PROCESSES**
(LONG FORM)
Lec 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**
Lec 3  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**
Lec 0  Credit 0
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.

**Business (BUS)**

**BUS-102**
**INTRODUCTION TO BUSINESS**
Lec 3  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**
Lec 3  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-130**
**INTRODUCTION TO ENTREPRENEURSHIP**
Lec 3  Credit 3
Emphasizes organizational development and human resource concepts and their applications to small business operations. Leadership development, management styles and decision making strategies are stressed.

**BUS-131**
**SMALL BUSINESS MANAGEMENT STRATEGIES**
Lec 3  Credit 3
This course emphasizes organizational development and human resource concepts and their applications to small business operations. Leadership development, management styles and decision making strategies are stressed.
BUS-135  
MANAGING THE  
ENTREPRENEURIAL VENTURE  
Lec 3  Credit 3  
This course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and managerial functions such as promotions and sales planning, decision making, staffing, organizing and directing. Students will develop an understanding of how financial systems, record keeping and risk management contribute to entrepreneurial success.

BUS-138  
SMALL BUSINESS MARKETING  
Lec 3  Credit 3  
Discussions and focus are on marketing applications. Students will participate in workshops and strategies sessions on entrepreneurial topics related to market research, product development, pricing, distribution, promotion, marketing campaigns and budgets.

BUS-140  
SMALL BUSINESS START-UP (ONLINE ONLY)  
Lec 2  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-145  
FINANCIAL ENTREPRENEURSHIP  
Lec 3  Credit 3  
Provides a straightforward practical examination of the business and financial knowledge required of the successful entrepreneur. Investigates key questions that challenge entrepreneurs such as how much money can/should be raised, from whom, what the reasonable valuation of the company is, and how funding should be structured. Prerequisite: BUS-135.

BUS-150  
E-COMMERCE  
Lec 3  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  
Lec 3  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-184  
BASIC LAW FOR ENTREPRENEURS  
Lec 3  Credit 3  
Provides a broad, practical examination of basic business law frameworks related to a new venture. Consideration is given to law-sensitive issues of intellectual property, employment law, business disputes, contracts, products liability, and white-collar crime. Students will explore key legal questions around going public, selling the company, and bankruptcy.

BUS-185  
BUSINESS LAW I  
Lec 3  Credit 3  
The legal environment of business. The study of contract requirements, personal property and bailments, as time permits.

BUS-186  
BUSINESS LAW II  
Lec 3  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  
Lec 2  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  
Lec 1  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.
**Computer Aided Drafting (CAD)**

**CAD-101**

**INTRODUCTION TO CAD**

Lec 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 [ONLINE ONLY]**

Lec 1  Lab 2  Credit 2
Online only. Designed to familiarize users of CAD systems with all of the tools necessary for the efficient production of drawings. Topics that will be covered include starting and ending commands, two-dimensional drawing commands, drawing management (layers and system settings), editing and viewing commands, text commands, dimensioning techniques and styles and symbols (blocks and external references).

**CAD-140**

**PARAMETRIC SOLID MODELING**  
**(ONLINE ONLY)**

Lec 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-172**

**INTRODUCTION TO CAD: AUTO CAD (ONLINE ONLY)**

Lec 1  Lab 2  Credit 2
An introduction to computer aided design and drafting. Actual hands-on experience in designing, drawing, and dimensioning using AutoCAD micro-based CAD software. The course presents logical step-by-step instruction about the AutoCAD commands, mode settings, drawing aids, shortcuts and other valuable characteristics of AutoCAD. Finished copies of the students’ work will be made on a printer or plotter.

**GEOMETRIC DIMENSIONING/ TOLERANCING**

Lec 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.

**CAD-248**

**PARAMETRIC CAD II**

Lec 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**

Lec 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.

**Computer Forensics (CFR)**

**CFR-100**

**INTRODUCTION TO COMPUTER FORENSICS**

Lec 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.

**Chemistry (CHM)**

**CHM-115**

**CHEMISTRY IN CONTEXT**

Lec 3  Lab 2  Credit 4
Students will learn basic general chemistry in the context of studying aspects of chemistry visible to a non-scientist in our society. Selected areas of chemistry such as water, fire, and our environment will be included, with an emphasis on the interface between chemistry and human everyday experiences.

**CHM-122**

**INTRODUCTION TO GENERAL CHEMISTRY**

Lec 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**

Lec 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**

Lec 3  Lab 2  Credit 4
The second semester of the traditional two semester sequence. General Chemistry II 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**

Lec 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
Lec 4  Lab 2  Credit 5
Continuation of Organic Chemistry 1, with advanced synthesis, instrumental analysis, and emphasis on biochemistry. Prerequisite: CHM-263.

Computer Programming (CIS)

CIS-125
INTRODUCTION TO PROGRAMMING LOGIC WITH LANGUAGE
Lec 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 AND SQL
Lec 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-366
GAME DEVELOPMENT I
Lec 2  Lab 2  Credit 3
Students will learn concepts related to mobile 2D game development and then apply what they learn to a variety of scenarios through examples and tutorials. The culmination of this course involves creating a fully functional 2D game. Prerequisite: CIS-125

CIS-367
GAME DEVELOPMENT II
Lec 2  Lab 2  Credit 3
In Game Development II, students will learn to add depth and advanced functionality into their games. Multiplayer components will be added, along with support for other languages and analytics tools in order to collect data from player behavior. The difference in mobile marketplaces along with developer requirements will be explored and techniques for monetizing games investigated. Prerequisite: CIS-337

CIS-504
STRUCTURED SYSTEMS ANALYSIS
Lec 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: 15 hours of IT classes completed toward degree.

CIS-802
SOFTWARE DEVELOPMENT CAPSTONE
Lec 2  Lab 2  Credit 3
Requires application of knowledge gained from programming design in the analysis, design, scheduling, and implementation of a complete software application for mobile devices. This course should be taken in the student's final semester. Prerequisite: CIS-367. Corequisite: CIS-504

CIS-810
EMERGING TECHNOLOGIES SEMINAR
Lec 1  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: 50 hours completed toward Information Technology

Communications (COM)

COM-102
COMMUNICATION SKILLS
Lec 3  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: Meet minimum placement test score requirement.

Construction (CON)

CON-108
CONSTRUCTION SAFETY
Lec 1  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 completion of this course students will receive the OSHA 10 hour General Construction certification.

CON-113
CONSTRUCTION PRINTREADING
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 3  Lab 6  Credit 6
A course of further carpentry with 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
Lec 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 AND RESOURCES
Lec 3  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
Lec 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
Lec 3  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 varied application and installation methods.

CON-350
INTERNSHIP
Lec 0  OJT 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.

Certified Professional Coder (CPC)

CPC-110
ESSENTIALS OF MEDICAL CODING AND BILLING
Lec 1  Lab 2  Credit 2
This is an introductory Course which will introduce the student to the essential components of Medical Coding and Billing. The student will identify the basics of Electronic Health Records (EHR). Students will also learn the purpose, terminology, documentation requirements, and functionality along with the legal and regulatory guidelines. This will include practice exercises to provide hands-on experience using EHR software to complete medical coding and billing tasks in the health care provider office setting. The course will also provide information on the uses of common brand and generic drug names. This information will help coders understand how to use medication information to identify situations in which further inquiry about comorbidities or complications may be necessary and ensure accurate reporting of chronic healthcare conditions.

CPC-121
INTRODUCTION TO MEDICAL PROCEDURAL CODING
Lec 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-128

CPC-126
DIAGNOSTIC CODING
Lec 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-121; CPC-128

CPC-128
INTRODUCTION TO MEDICAL INSURANCE & BILLING
Lec 3  Credit 3
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 AND BILLING II
Lec 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
Criminal Justice (CRJ)

**CRJ-100**  
**INTRODUCTION TO CRIMINAL JUSTICE**  
Lec 3  
**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**  
Lec 3  
**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**  
Lec 3  
**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**  
Lec 3  
**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 eras of policing and correctional agencies. The structure and style of 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 the correctional work environment will also be discussed.

**CRJ-120**  
**INTRODUCTION TO CORRECTIONS**  
Lec 3  
**Credit 3**  
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-128**  
**VICTIMOLOGY**

**CRJ-130**  
**CRIMINAL LAW**  
Lec 3  
**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**  
Lec 3  
**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**  
Lec 3  
**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**  
Lec 3  
**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**  
Lec 3  
**Credit 3**  
The course is an examination of the role 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.

CRR-932
INTERNSHIP
Lec 0 OJT 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.

Collision Repair and Refinishing (CRR)

CRR-120
MIG (GMAW) WELDING
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 2 Lab 7 Credit 5.5
This course will serve as an introduction to the repair and realignment of modern Unibody 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 0 OJT 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.

Computer Science
(CSC)

CSC-110
INTRODUCTION TO COMPUTERS
Lec 3 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
Lec 2 Lab 2 Credit 4
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.

Film and Theatre
(DRA)

DRA-101
INTRODUCTION TO THEATRE
Lec 3 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
Lec 3 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-141
THEATRE AND SPEECH PARTICIPATION I
Lec 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
Lec 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-165
STAGECRAFT
Lec 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.

Drafting (DRF)

DRF-113
FUNDAMENTALS OF TECHNICAL DRAFTING
Lec 1 Lab 4 Credit 3
Fundamentals of drawing techniques and the availability of appropriate training sites. Prerequisite: Successfully complete ALL Auto Collision Repair Course work through third semester.
Lec 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.

Early Childhood Education (ECE)

ECE-133
CHILD HEALTH, SAFETY AND NUTRITION
Lec 3  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
Lec 3  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.

Economics (ECN)

ECN-110
INTRODUCTION TO ECONOMICS
Lec 3  Credit 3
An introductory economics course. Lessons will include both micro and macro economies. Competencies will include supply, demand, market structures, unemployment and international trade.

ECN-120
PRINCIPLES OF MACROECONOMICS
Lec 3  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 MICROECONOMICS
Lec 3  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.

Education (EDU)

EDU-212
EDUCATIONAL FOUNDATIONS
Lec 3  Credit 3
This survey course is designed to examine the historical, philosophical, sociological, political, economic, and legal foundations of the American public education system. Students will explore the nature of school environments, design and organization of school curriculum, and characteristics of effective schools and instruction in grades P-12. Educational structures, practices, and projections for the future will be studied. COREQUISITE: EDU-920.

EDU-220
HUMAN RELATIONS FOR THE CLASSROOM TEACHER
Lec 3  Credit 3
This course is designed to develop an awareness of teaching the responsibility of educators in establishing educational programs that attempt to develop sensitivity to and understanding of the different cultural/ethnic groups found in a pluralistic society. This course will include a history of the discrimination that many minority groups have encountered in North America and possible educational strategies for dealing with the problems minority groups have encountered in the educational process.

EDU-235
CHILDREN'S LITERATURE
Lec 3  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
Lec 3  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
Lec 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
Lec 0  Lab 4  Credit 2
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-212.

Engineering (EGR)

EGR-420
PLTW DIGITAL ELECTRONICS
Lec 2  Lab 2  Credit 3
This course is an introduction to fundamental digital circuits and systems presented by study of integrated circuit logic modules. Emphasis is placed on troubleshooting techniques and tools.

Engineering Technology (EGT)

EGT-116
CONTINUOUS QUALITY MANAGEMENT
Lec 3  Credit 3
This introductory course will lead the student into the world of quality assurance in manufacturing.
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
Lec 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
Lec 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 AND TROUBLESHOOTING
Lec 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
PLTW-INTRODUCTION TO ENGINEERING DESIGN
Lec 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
PLTW-DIGITAL ELECTRONICS
Lec 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.

Electronics Technology (ELE)

ELE-116
BLUEPRINT READING
Lec 1 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
Lec 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
Lec 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
Lec 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-218
MOTION CONTROL

Lec 1 Lab 2 Credit 2
This course is an introduction to electronic motion control in industrial control systems. Students will work with motion control software, which communicates to servo controllers, servo drives, and motion controllers in industrial control systems. Precise torque, velocity, and position of rotary and linear prime movers or actuators are controlled with resolvers and encoders will also be studied.

ELE-219
SUPERVISORY CONTROL AND DATA ACQUISITION
Lec 1 Lab 4 Credit 3
This course discusses concepts related to acquiring data to monitor automated control systems (SCADA). Students will design and configure a SCADA control systems project using computer hardware, software, and networking.

ELE-310
INDUSTRIAL ELECTRICITY
Lec 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.

Electronics (ELT)

ELT-116
PRINCIPLES OF ELECTRONICS
Lec 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
Lec 3 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
Lec 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
Lec 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 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
Lec 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 CONTROLERS
Lec 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
ADVANCED PLC AND SYSTEM INTEGRATION (MECHATRONICS)
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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
Lec 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.

ELT-486
ELECTROMECHANICAL TECHNOLOGY
Lec 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
Lec 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
Lec 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 emphasized. 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-163.

ELT-801
MEDICAL DOCUMENTATION AND COMPLIANCE
Lec 3 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
Lec 0 OJT 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.

Emergency Medical Services (EMS)

EMS-114
EMERGENCY MEDICAL RESPONDER
Lec 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
Lec 5 Lab 2 OJT 4 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
Lec 5 Lab 2 Clinical Credit 7
This course will provide the student with roles and responsibilities of the EMS provider; well-being including injury prevention and infections disease; an overview of human systems; pharmacology; venous access; air-way 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
Lec 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: 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 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 II
Lec 9 Lab 8 Clinical OJT 4 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.
fluid management skills, communication skill development, and cardiac monitoring skills. Prerequisite: EMS-664.

**English Composition (ENG)**

**ENG-013 BASIC WRITING IN ENGLISH**  
Lec 2  Lab 2  Credit 3  
This course provides group instruction in basic writing skills: practice in all stages of the writing process; developing the skills to write a variety of focused, developed, and organized sentences, paragraphs, and short essays; writing to communicate with the reader; proofreading for spelling, grammar, and punctuation errors. Students in this course should not have previous or concurrent enrollment in Communication Skills, Composition I and/or II, Technical Writing, Business English, or Writing for the Workplace.

**ENG-067 COMPOSITION I LAB**  
Lec 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: Meet minimum placement test score requirement or ENG-061 with a grade of C- or better.

**ENG-105 COMPOSITION I**  
Lec 3  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: Meet minimum placement test score requirement.

**ENG-106 COMPOSITION II**  
Lec 3  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: ENG-105 with a grade of C- or better.

**ENG-110 WRITING FOR THE WORKPLACE**  
Lec 3  Credit 3  
Writing for the Workplace prepares students for the various types of written communication required by professional employers. In this class, students learn how to write informal and formal documents and reports in the design and style of career-related communication with a focus on audience, purpose, subject, and genre and how they affect our writing choices. This course also includes a review of grammar and usage skills, as well as emphasizes effective language use in real-world applications.

**ENG-111 TECHNICAL WRITING (ONLINE)**  
Lec 3  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: Meet minimum placement test score requirement.

**ENG-131 BUSINESS ENGLISH**  
Lec 3  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: Meet minimum placement test score requirement. No waivers.

**ENG-221 CREATIVE WRITING**  
Lec 3  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: ENG-105 with a grade of C- or better.

**ENV-111 ENVIRONMENTAL SCIENCE**  
Lec 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.

**ENV-145 CONSERVATION BIOLOGY (ONLINE)**  
Lec 3  Lab 2  Credit 4  
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. Prerequisite: ENV-111

**Intensive English as a Supplemental Language (ESI)**

**ESI-010 PHONETICS AND PRONUNCIATION**  
Lec 3  Credit 3  
The study of English segments and intonation for non-native speakers. Emphasizes the use of phonetic alphabet. Focuses on using segmentations and intonation in informal language.
settings. Prerequisites: ESL-013, 015, 018, or minimum placement test score requirement.

Non-Intensive English as a Supplemental Language (ESL)

ESL-002
CULTURAL ORIENTATION
Lec 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-006
GRAMMAR IN CULTURAL CONTEXT
Lec 2  Credit 2
Communicative grammar course for non-native speakers of English. Includes studying the usage of different grammatical structures and their application in various areas of interaction. Exposes students to English culture and cultural expectations.

ESL-008
COMMUNICATION IN CULTURAL CONTEXT
Lec 2  Credit 2
Communication course for non-native speakers of English. Includes usage of listening and speaking skills across various areas of interaction: idioms and slang, small talk and business interviews. Exposes students to English culture and cultural expectations in conversations and oral interaction. This course is recommended to be taken in conjunction with ESL-006 Grammar in Cultural Context.

ESL-013
ESL LISTENING/SPEAKING I
Lec 4  Credit 4
A beginning course designed to develop reading and writing skills. Students learn new words and phrases, work on spelling and become familiar with the use of basic tenses. Corequisites: ESL-013 and ESL-018.

ESL-018
ESL GRAMMAR I
Lec 3  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. Corequisites: ESL-015 and ESL-013.

ESL-033
ESL LISTENING/SPEAKING II
Lec 3  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. Prerequisite: ESL-013, Listening/Speaking and meets minimum placement test score requirements. Corequisites: It is recommended to take the course concurrently with ESL-035 and ESL-038.

ESL-035
ESL READING/WRITING II
Lec 3  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. Prerequisite: ESL-015 and meets minimum placement test score requirements. Corequisite: It is recommended to take the course concurrently with ESL-033, Listening/Speaking II and ESL-038, Grammar II.

ESL-038
ESL GRAMMAR II
Lec 3  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. Prerequisites: ESL-018 and meets minimum placement test score requirement. Corequisites: It is recommended to take the course concurrently with ESL-035, Reading/Writing II and ESL-033, Listening/Speaking II.

ESL-053
ESL READING/WRITING III
Lec 2  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. Prerequisite: ESL-035 and meet minimum placement test score requirement. Corequisite: It is recommended to take the course concurrently with ESL-055, Listening/Speaking III and ESL-058, Grammar III.

ESL-055
ESL LISTENING/SPEAKING III
Lec 2  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. Prerequisite: ESL-033; meet minimum placement test score requirement. Corequisite: It is recommended to take the course concurrently with ESL-053 and ESL-058.

ESL-058
ESL GRAMMAR III
Lec 2  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. Prerequisites:
ESL-03 and meet minimum placement
test score requirement. Corequisites:
It is recommended to take the course
congruently with ESL-075 and ESL-079.

ESL-073
ESL READING/Writing IV
Lec 2 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. Prerequisite:
ESL-053 and meet minimum placement
test score requirement. Corequisite:
It is recommended to take the course
congruently with ESL-075, Listening/
Speaking IV and ESL-079 Grammar IV.

ESL-075
ESL LISTENING/SPEAKING IV
Lec 2 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. Prerequisite:
ESL-055 and meet minimum placement
test score requirement. Corequisite:
It is recommended to take the course
congruently with ESL-073, Reading/
Writing IV and ESL-079, Grammar IV.

ESL-079
ESL GRAMMAR IV
Lec 2 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.
Prerequisites: ESL-058; meet minimum placement
test score requirement.
Corequisites: It is recommended to take
the course concurrently with ESL-073,
Reading/Writing IV and ESL-075,
Listening/Speaking IV.

ESL-080
ESL READING/Writing V
Lec 1-2 Credit 1-2
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. Prerequisites:
ESL-073 and meet minimum placement
test score requirement. Corequisite:
It is recommended to take the course
congruently with ESL-081, Listening/
Speaking V and ESL-082, Grammar V.

ESL-081
ESL LISTENING/SPEAKING V
Lec 1-2 Credit 1-2
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. Prerequisites:
ESL-075 and meet minimum placement
test score requirement. Corequisites:
It is recommended to take the course
congruently with ESL-080, Reading/
Writing V, and ESL-082, Grammar V.

ESL-082
ESL GRAMMAR V
Lec 1-2 Credit 1-2
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.
Prerequisites: ESL-079 and meet minimum placement
test score requirement. Corequisites:
It is recommended to take the course
congruently with ESL-080, Reading/
Writing V and ESL-081, Listening/Speaking V.

Finance (FIN)

FIN-121
PERSONAL FINANCE (ONLINE ONLY)
Lec 3 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 (ONLINE
ONLY)
Lec 3 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.

French (FLF)

FLF-141
ELEMENTARY FRENCH I
Lec 3 Lab 2 Credit 4
Introductory course for those with no
prior background. Students become
acquainted with the sounds and structure of
French emphasizing useful vocabulary
and development of basic conversational
skills. Practice supplemented by regular
lab activities.

FLF-142
ELEMENTARY FRENCH II
Lec 3 Lab 2 Credit 4
Progressive development of conversational
skills with additional emphasis on reading.
Prerequisite: FLF-141 or equivalent.

German (FLG)

FLG-141
ELEMENTARY GERMAN I
Lec 3 Lab 2 Credit 4
Introductory course for those with no
prior background. Students become
acquainted with the sounds and structure of
German emphasizing useful vocabulary
and development of basic conversational
skills. Practice supplemented by regular
lab activities.

FLG-142
ELEMENTARY GERMAN II
Lec 3 Lab 2 Credit 4
Progressive development of conversational
skills with additional emphasis on reading.
Prerequisite: FLG-141 or equivalent.

www.scciowa.edu (319) 208-5000
Spanish (FLS)

FLS-141
ELEMENTARY SPANISH I
Lec 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
Lec 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.

FLS-231
INTERMEDIATE SPANISH I
Lec 3  Credit 3
A review of the fundamentals of grammar, emphasizes oral communication among students. It also aims at increasing students' reading comprehension, vocabulary and a better understanding of Hispanic culture. Prerequisite: FLS-142 or C grade on Proficiency Test or permission of instructor.

FLS-232
INTERMEDIATE SPANISH II
Lec 3  Credit 3
A continuation of Intermediate Spanish I, reviews the fundamentals of grammar while emphasizing oral communication among students. It also aims at increasing students' reading comprehension, vocabulary and a better understanding of Hispanic culture. Prerequisite: FLS-231 or C grade on Proficiency Test or permission of instructor.

Graphic Communications (GRA)

GRA-116
DIGITAL PREFLIGHT PRODUCTION
Lec 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.

GRA-126
CULTURAL GEOGRAPHY
Lec 3  Credit 3
This course introduces students to fundamental concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include population and migration, culture, diffusion, political and economic systems, language, religion, gender, and ethnicity.

GEO-121
WORLD REGIONAL GEOGRAPHY
Lec 3  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-126
CULTURAL GEOGRAPHY
Lec 3  Credit 3
This course introduces students to fundamental concepts, skills, and practices of human geography. Place, space, and scale serve as a framework for understanding patterns of human experience. Topics for discussion may include population and migration, culture, diffusion, political and economic systems, language, religion, gender, and ethnicity.

GEO-140
DIGITAL IMAGING

GRA-140
DIGITAL IMAGING

GRA-158
WEB MULTIMEDIA
Lec 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
Lec 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-175
TYPOGRAPHY
Lec 3  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.

GRA-173
GRAPHIC DESIGN PRINCIPLES
Lec 2  Lab 2  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**
Lec 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.

**GRA-275**
**ADVANCED GRAPHIC DESIGN**
Lec 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**
Lec 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-933**
**INTERNSHIP**
Lec 0  OJT 16  Credit 4
This course is designed to provide the student with a practical experience in graphic communications prior to completion of the associate of applied science degree. Placement will depend on student's skill level and the availability of appropriate training firms. The internship should be taken during the student's final semester.

**Heavy Equipment (HEQ)**

**HEQ-131**
**SAFETY AND INTRODUCTION TO HEAVY EQUIPMENT**

**Lec 2  Lab 2  Credit 3**
This is an introduction to the equipment, jobs, working conditions, maintenance, and safety of equipment operation.

**History (HIS)**

**HIS-131**
**WORLD CIVILIZATION I**
Lec 3  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**
Lec 3  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**
Lec 3  Credit 3
A survey of American social, political, economic and intellectual developments from the Colonial period to 1877.

**HIS-152**
**US HISTORY SINCE 1877**
Lec 3  Credit 3
A survey of American social, political, economic and intellectual developments since 1877.

**HIS-211**
**MODERN ASIAN HISTORY**
Lec 3  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-231**
**CONTEMPORARY WORLD AFFAIRS**
Lec 3  Credit 3
This course deals with the immediate problems facing the world from 1945 to the present, efforts to establish peace, the decline of colonialism, developments in the Third World, the Cold War, conflicting ideologies of the twentieth century and their interpretation in conflicting international economics and power struggles.

**HIS-251**
**US HISTORY: 1945 TO PRESENT**
Lec 3  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-257**
**AFRICAN AMERICAN HISTORY**
Lec 3  Credit 3
A study of African American people from their African origins through the contemporary civil rights movement in the United States. This survey includes the study of slavery before the Civil War, the examination of the role of the African American during the war and Reconstruction period, growth of segregation, and the fight for civil rights culminating in the current position of the African American in the United States.

**HIS-266**
**THE CIVIL WAR**
Lec 3  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.

**HIS-271**
**AMERICAN FRONTIER HISTORY**
Lec 3  Credit 3
An intensive study of the westward movement in American history. Topics to be covered include: the Indians, the fur trade, the development of transportation, the government land policy, and the settlement of the Great Plains.

**Health Information Technology (HIT)**

**HIT-211**
**BASIC MEDICAL INSURANCE & CODING**
Lec 2  Lab 2  Credit 3
This course is designed to assist students in understanding the complexities of current insurance procedures encountered in
Health Science (HSC)

HSC-114  MEDICAL TERMINOLOGY  
Lec 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-163  NUTRITION  
Lec 3  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  
Lec 2  Lab 1.3  Clinical Credit 2.25  2  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  
Lec 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.

HSC-212  PATHOPHYSIOLOGY (INDIAN HILLS CC COURSE)  
Lec 3  Credit 3  
The nature, cause, and treatment of disease are the focus of pathophysiology. The characteristics and etiology of diseases are presented using appropriate medical terminology to help students understand the relationship between clinical signs and disease processes.

HSC-226  HEALTH SOCIETY AND AGING (INDIAN HILLS CC COURSE)  
Lec 3  Credit 3  
This course provides a multidisciplinary perspective of aging. Biological, psychological, and sociological aspects of aging are explored. The impact of an aging population on societal issues such as politics, education, public policy, religions and health care will be considered.

HSC-230  EMPLOYMENT PREPARATION (INDIAN HILLS CC COURSE)  
Lec 1  Credit 1  
This course is designed for students preparing to seek employment. Written documents, including letters and resumes, will be discussed and created. Job seeking techniques, including interviewing skills and human relations skills, will also be addressed.

Human Services (HSV)

HSV-163  HELPING SKILLS  
Lec 3  Credit 3  
An introduction to skills useful in dealing with people who abuse alcohol and drugs by introducing the student to basic communication and helping skills appropriate to dealing with people suffering from alcohol and other drug abuse; giving the student working knowledge of and practical experience with those skills. Prerequisites: HSV-261, SPC-112, ENG-105.

HSV-220  INTRODUCTION TO COUNSELING THEORIES  
Lec 3  Credit 3  
A survey of differing philosophies and styles of counseling approaches and their practical application. Including but not limited to: Transactional Analysis, Client-Centered Therapy, Rational Emotive Theory, Reality Therapy, Gestalt, etc. Actual practice in standard means of facilitating the helping process and identification of personal counseling style is included. Prerequisite: HSV-261.

HSV-228  GROUP COUNSELING TECHNIQUES  
Lec 2  Lab 2  Credit 3  
An overview of group counseling theories, methods and skills. Students will obtain the knowledge and skills necessary to facilitate counseling groups with chemically dependent clients. Students will practice and demonstrate competency in group facilitation skills. Students will also obtain experience as a group member through participation in a weekend training group lab and ongoing group lab in class. Prerequisites: HSV-261, SPC-112 or SPC-122, ENG-105. Pre or corequisite: HSV-163.

HSV-241  SPECIAL ISSUES COUNSELING ADOLESCENTS  
Lec 1  Credit 1  
This course explores selected concerns that adolescents are likely to bring into a counseling situation. Topics include adolescent developmental tasks, causes of adolescent drug use, effects of drug use on adolescent development and treating chemically dependent adolescents.

HSV-261  INTRO TO CHEMICAL DEPENDENCY COUNSELING  
Lec 3  Credit 3  
A survey of the use, abuse and addictive nature of ethyl alcohol and other mood altering chemicals, providing the student with a basic knowledge of its nature, scope and complexity and the wide range of current approaches to its treatment and prevention.

HSV-262
WORKING WITH FAMILIES OF ALCOHOL AND DRUG ABUSE
Lec 3 Credit 3

HSV-285 CASE MANAGEMENT: INTAKE TO DISCHARGE
Lec 3 Credit 3
The course will offer an overview of the twelve core functions recognized as necessary for certification (assessment, treatment, planning, record keeping, etc.). Students will learn the knowledge and skills needed to effectively perform each core function. Prerequisites: HSV-261, HSV-163, SPC-112, ENG-105.

HSV-920 COUNSELING PRACTICUM
Lec 0 Lab 40 Credit 11
Supervised experience in substance abuse counseling which emphasizes practical application of the core functions. Prerequisite: A student must receive a grade of 'C' (2.0) or higher in each of the following courses: HSV-261, HSV-163, HSV-228, HSV-262, HSV-220, and HSV-285. Corequisite: HSV-925.

HSV-925 COUNSELING PRACTICUM SEMINAR
Lec 1 Credit 1

Humanities (HUM)

HUM-114 MULTICULTURAL PERSPECTIVES
Lec 3 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
Lec 3 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
Lec 3 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.

Industrial Technology (IND)

IND-104 INDUSTRIAL PUMPS
Lec 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
Lec 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
Lec 1 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
Lec 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 AND PLANT SAFETY
Lec 2 Credit 2
This course relates OSHA as it applies to employers and 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
Lec 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

www.scciowa.edu (319) 208-5000
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.

Legal Assistant (LGL)

LGL-173
LEGAL ASSISTANT LITIGATION
Lec 3 Credit 3
This course prepares legal administrative assistant students to aid an attorney in litigation procedures. Students receive instruction regarding the detail necessary for trial preparation from the instant the dispute requires the services of an attorney.

LGL-280
LEGAL CASE STUDIES
Lec 2 Lab 2 Credit 3
Designed to lead students through real and simulated court cases from beginning to end. Students will follow and research trials such as those involving criminal activity, family law, estate law, probate, and bankruptcy. Students will learn the steps and timing for creating and filing corresponding court documents relevant to each case. Research, ethics, confidentiality, deadlines, and accuracy will be emphasized. Prerequisite: LGL-173

Literature (LIT)

LIT-101
INTRODUCTION TO LITERATURE
Lec 3 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
Lec 3 Credit 3
A survey of the American novel with emphasis on 20th century works.

LIT-121
AMERICAN SHORT STORY
Lec 3 Credit 3
A survey of the American short story from Edgar Allen Poe to the present.

LIT-131
NATIVE AMERICAN LITERATURE
Lec 3 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
Lec 3 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-151
WORLD LITERATURE II
Lec 3 Credit 3
A survey of important works of literature from the Renaissance to the present. This will include selections of prose, poetry, and drama that represent the spirit of the times in which they were written.

LIT-184
YOUNG ADULT LITERATURE
Lec 3 Credit 3
A discussion and evaluation of the literature written for adolescents. Types of literature for this age group and methods of utilizing this literature in school and home are addressed. Course concerns focus on the study of various Young Adult Literature genres, the reading/writing connection, authors' styles and themes and censorship.

LIT-209
FORMS OF LITERATURE: FILM ADAPTATION
Lec 3 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.

Medical Assistant (MAP)

MAP-121
ADMINISTRATIVE PROCEDURES I: MEDICAL OFFICE
Lec 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 2015 approved standards of CAAHEP.

MAP-122
ADMINISTRATIVE PROCEDURES II: MEDICAL OFFICE
Lec 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-139, MAP-121, MAP-364, BIO-163.

MAP-139
INTRODUCTION TO ELECTRONIC HEALTH RECORDS
Lec 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 wpm timed typing test score. Corequisite: MAP-121.

MAP-364
CLINICAL PROCEDURES FOR MEDICAL OFFICE I
Lec 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
Lec 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 chemistry, 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
Lec 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
Lec 1 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
Lec 1 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 AND DISEASE
Lec 3 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
Lec 1 Credit 1
A discussion of job related problems and study of current medical office procedures and clinical skills. Prerequisites: All previous program classes. Corequisite: MAP-615.

MAP-615
CLINICAL EXTERNSHIP
Lec 0 OJT 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. Corequisite: MAP-602.

Math (MAT)

MAT-052
PRE-ALGEBRA
Lec 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: Meets minimum placement testing requirements.

MAT-062
ELEMENTARY ALGEBRA
Lec 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: Meets minimum placement testing requirements.

MAT-079
ELEMENTARY GEOMETRY
Lec 1 Lab 2 Credit 2
This course is designed for college students who have completed an introductory algebra course but did not take high school geometry or took it so long ago they need a review. This will be equivalent to one year of high school geometry. Prerequisite: Meets minimum placement test requirements or MAT-062.

MAT-092
INTERMEDIATE ALGEBRA
Lec 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: Meets minimum placement test requirement.

MAT-094
INDEPENDENT STUDY - MATH
Lec 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
Lec 3  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: Meets minimum placement testing requirements.

MAT-112  MATH FOR ELEMENTARY TEACHERS I
Lec 3  Credit 3
Math for Elementary Teachers I is a first of two 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
Lec 3  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-127  COLLEGE ALGEBRA AND TRIGONOMETRY
Lec 5  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 meets minimum placement testing requirements.

MAT-128  PRECALCULUS
Lec 4  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 and MAT-128 or minimum test requirement.

MAT-140  FINITE MATH
Lec 3  Credit 3
This course is designed for Business 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: Meet minimum placement test score requirement.

MAT-149  LINEAR ALGEBRA
Lec 3  Credit 3
This course will include the study of systems of equations, matrices, determinants, vector spaces, inner product spaces, linear transformations, eigenvalues and eigenvectors. Applications relating to these topics will be investigated. Prerequisite: MAT-216 or appropriate test scores.

MAT-156  STATISTICS
Lec 3  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 meets minimum placement testing requirements.

MAT-165  BUSINESS CALCULUS
Lec 3  Credit 3
This course is a continuation of Finite Math, 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: Meet minimum placement test score requirement.

MAT-210  CALCULUS I
Lec 4  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 or meet minimum placement test score requirement.

MAT-216  CALCULUS II
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 meet minimum placement test score requirement.

**MAT-772 APPLIED MATH (ONLINE ONLY)**

**Lec 3 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.

### Manufacturing (MFG)

**MFG-156 INTRODUCTION TO CNC MACHINING**

**Lec 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**

**Lec 3 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**

**Lec 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 manufacture 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**

**Lec 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**

**Lec 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**

**Lec 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**

**Lec 1 Lab 4 Credit 3**


**MFG-303 ADVANCED CNC PROGRAMMING**

**Lec 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
Lec 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
Lec 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
Lec 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.

Management (MGT)

MGT-101
PRINCIPLES OF MANAGEMENT
Lec 3 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
Lec 3 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
Lec 3 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.

Marketing (MKT)

MKT-110
PRINCIPLES OF MARKETING
Lec 3 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
Lec 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
Lec 3 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
Lec 3 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-160
PRINCIPLES OF RETAILING
Lec 3 Credit 3
Retailing organization, buying, selling, promotion, inventory control, pricing and location and layout.

Mass Media (MMS)

MMS-111
VIDEO PRODUCTION
Lec 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.

Medical Transcription (MTR)

MTR-158
INTRODUCTION TO MEDICAL SCRIBE
Lec 2 Lab 6 OJT 8 Credit 7
This course is designed to prepare students to create a patient care record under the direct supervision of a physician. Students will learn to recognize and obtain a chief complaint, history of present illness, past medical, social and family histories, review of systems, and physical exam. Medical procedures, lab results, and other pertinent patient information for a patient visit will also be covered. Practical experience will include transcription/editing of history and physical reports, consultation reports, SOAP notes, progress notes, and office notes. Students will obtain knowledge in classification of drugs, normal routes of administration, usage, and generic and brand names. Routine patient encounters, management of chronic diseases, and characteristics...
of disease processes will be discussed. Students will identify the importance and challenges of medical documentation, including guidelines for evaluation and management of visits.

**Applied Music (MUA)**

**MUA-101**  
**APPLIED VOICE**  
**Lec 1** Credit 1  
Private instruction on band and orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**MUA-104**  
**APPLIED VOICE**  
**Lec 2** Credit 2  
Private instruction on band and orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**MUA-108**  
**ITALIAN/LATIN/ENGLISH DICTION FOR SINGERS**  
**Lec 2** 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-120**  
**APPLIED PIANO**  
**Lec 1** Credit 1  
Private instruction on band an orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**MUA-121**  
**APPLIED PIANO II**  
**Lec 2** Credit 2  
Private instruction on band an orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**MUA-124**  
**APPLIED GUITAR**  
**Lec 1** Credit 1  
Private instruction on band an orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**MUA-125**  
**APPLIED GUITAR II**  
**Lec 2** Credit 2  
Private instruction on band an orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**MUA-126**  
**APPLIED STRINGS**  
**Lec 1** Credit 1  
Private instruction on band an orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**MUA-127**  
**APPLIED STRINGS II**  
**Lec 2** Credit 2  
Private instruction on band an orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**MUA-170**  
**APPLIED WOODWINDS**  
**Lec 1** Credit 1  
Private instruction on band an orchestra instruments, voice, piano and organ. The students will be expected to perform on their instrument or voice at a public recital at the end of the term. Credit is granted for the specific areas studied, based on the amount of work, time and involvement as specified by the music faculty before enrollment. An additional fee is charged for each applied music area selected.

**General Music (MUS)**

**MUS-100**  
**MUSIC APPRECIATION**  
**Lec 3** 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**  
**Lec 3** 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**  
**Lec 3** 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. Co-requisite: MUS-135.

MUS-121
MUSIC THEORY II
Lec 3 Credit 3
This course is a continuation of Music Theory 1. Requires attendance at music programs as specified by the music faculty. Prerequisite: MUS-120. Corequisite: MUS-136.

MUS-135
MUSIC THEORY LAB I
Lec 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-136
MUSIC THEORY LAB II
Lec 0 Lab 2 Credit 1
Continuation of MUS-135. Prerequisite: MUS-135. Corequisite: MUS-121.

MUS-140
CONCERT CHOIR
Lec 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 participates in state community college music activities. Maximum of 4 semester hours may be earned.

MUS-161
CLASS VOICE
Lec 0 Lab 2 Credit 1

MUS-162
INSTRUMENTAL ENSEMBLES
Lec 0 Lab 2 Credit 1
This course is open to students who seek creative expression through ensemble performance. Credit is granted to those who meet requirements for rehearsals and performances through participation in the Southeast Iowa Symphony Orchestra, the Southeast Iowa Concert Band or an established instrumental ensemble at Southeastern Community College. A maximum of 4 semester hours may be earned.

MUS-204
HISTORY OF ROCK AND ROLL
Lec 3 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.

Computer Networking (NET)

NET-101
IT FUNDAMENTALS
Lec 1 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-118
BASIC COMPUTER NETWORKING/ HARDWARE
Lec 2 Lab 2 Credit 3
This course is an introductory course about basic computer networking concepts and computer hardware. It will provide a foundation for anyone needing basic computer knowledge. It covers network and hardware terminology, hardware devices, network protocols, topologies, and connections. The student will get hands-on experience adding and replacing hardware and network components.

NET-122
COMPUTER HARDWARE BASICS
Lec 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
Lec 3 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
Lec 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
Lec 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
Lec 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
NET-442
LINUX OPERATING SYSTEM
Lec 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
Lec 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 footprinting, 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
Lec 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
Lec 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.

NETWORK INTERNETHPH
Lec 0 OJT 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 INTERNETSHIP
Lec 0 OJT 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.

Occupational Therapy Assistant (OTA)

OTA-106
TRENDS IN OTA (INDIAN HILLS CC COURSE)
Lec 3 Credit 3
This course is an introduction to and investigation of a career choice in Occupational Therapy. A foundational overview of the history, philosophy, ethics, and role of occupational therapy in the health care environment is provided. The roles and functions of the occupational therapist and occupational therapy assistant in traditional and emerging practice areas, as well as the role of the AOTA will be explored. Models of care and the essentials of success in the OTA program will be discussed. Students will complete required HIPPA, Infection Control and Mandatory Reporting for child/adult training for Health Care Providers.

OTA-121
PRINCIPLES OF OT (INDIAN HILLS CC COURSE)
Lec 3 Lab 2 Credit 4
This course provides an introduction to skilled observation of identified performance areas in occupational therapy, activity analysis, goal setting, oral and written reporting skills, professional documentation formats and the use of the OT Practice Framework. Basic patient handling techniques and functional transfers will be practiced. Specific theory and philosophy with regard to physical, psychological, and developmental diagnosis will be addressed. Current issues relating to the field, the framework of occupational therapy practice and process, and intervention approaches will be examined.

OTA-131
PEDIATRIC PRACTICE FOR THE OTA (INDIAN HILLS CC COURSE)
Lec 3 Lab 2 Credit 4
This course introduces students to entry-level pediatric occupational therapy skills by examining theoretical practice frameworks for individuals ages birth through twenty-one. Focuses of this course include: typical and atypical development, physical disabilities, neurological impairments, developmental dysfunction and their effects on childhood occupation. The role of the OTA in a variety of pediatric settings will be explored. Childhood conditions, evaluation, program planning and program implementation will be discussed. Family, sociocultural and socioeconomic conditions, legal issues and support services for the pediatric population will be explored.

OTA-141
THERAPEUTIC MEDIA IN OT (INDIAN HILLS CC COURSE)
Lec 2 Lab 2 Credit 3
This course addresses the knowledge and skills required to recognize the value of and link between life role occupations as applied to therapeutic interventions. Topics include the use of crafts and games, splinting, therapeutic exercises and application to various diagnoses. Activity analysis and methods of determining and selecting age appropriate and culturally meaningful activities for OT consumers will be examined. Approaches to teaching, learning, and professional communication will be explored through individual and group treatment role plays.

OTA-151
ADULT PHYSICAL DISABILITY PRACTICE FOR THE OTA (INDIAN HILLS CC COURSE)
Lec 3 Lab 2 Credit 4
This course examines occupational therapy theoretical practice frameworks in adult physical and neurological dysfunction. Common problems seen in medical and orthopedic diseases and disabilities that affect occupational performance in the adult will be addressed, and the method of treatment will be investigated. Treatment methods and activities such as splinting, exercises and physical agent modalities will be explored. Models of service delivery, motor control theories, daily living skills, work, leisure, education and social participation will be presented. Client-centered, meaningful occupation for the purposes of rehabilitation, skill maintenance and wellness, and prevention of decline in occupational performance will be emphasized.

OTA-161 TRADITIONAL AND EMERGING PRACTICE IN OT (INDIAN HILLS CC COURSE)
Lec 1.5 Lab 0.5 Credit 2
This course explores traditional, specialized and emerging practice areas in occupational therapy. Topics to be addressed may include: hand injuries, assistive technology, wheelchair assessment, low vision rehabilitation, lymphedema, vocational rehabilitation, work hardening and workplace assessments.

OTA-171 PSYCHOSOCIAL PRACTICE FOR THE OTA (INDIAN HILLS CC COURSE)
Lec 2.5 Lab 0.5 Credit 3
This course focuses on the role of the occupational therapy assistant in providing services in both medical and community-based settings. The relevance of occupation and goal-directed activity will be explained. A survey of conditions which may cause emotional, mental, and social disability will be explored. Normal and pathological conditions associated with aging will be discussed. An overview of group process, group leadership and facilitation, types of therapeutic groups and development of communication and observation skills will be included.

OTA-210 PROFESSIONAL ISSUES IN OT (INDIAN HILLS CC COURSE)
Lec 2 Credit 2
This course reinforces the concepts and principles of professionalism for the occupational therapy assistant in the delivery of services. Basic tenets of professional behavior, values, and ethics will be discussed. Topics addressed include: ethical and legal aspects, cultural competence, structure and function of institutions, reimbursement issues, and the roles of key professional organizations. Job seeking techniques including interview skills, and resume and letter writing will be addressed. Resources for life-long learning and professional support will be provided.

OTA-212 FUNCTIONAL KINESIOLOGY (INDIAN HILLS CC COURSE)
Lec 2 Lab 2 Credit 3
This course introduces human movement within the context of occupational performance. Principles from the biological sciences will be applied to the biomechanical principles of human movement. Topics include survey of the skeletal system, articular system and muscular system. Exercise principles are explored from the perspective of the occupational therapy practitioner. Movement within the context of activities will be analyzed. Laboratory practice addresses basic biomechanics, manual muscle testing, goniometric measurement, range of motion techniques, and activities of daily living motion analysis.

OTA-220 CLINICAL REASONING FOR OTA (INDIAN HILLS CC COURSE)
Lec 2 Credit 2
This course introduces the clinical reasoning process with a focus on analyzing functional status and occupational performance of a client, identifying problems and goals, and determining an appropriate plan of action. Aspects of clinical reasoning and evidence-based practice are explored.

OTA-801 OTA LEVEL I A FIELDWORK (INDIAN HILLS CC COURSE)
Lec 0 Clinical 3 Credit 1
This course introduces students to clinical practice for individuals with mental health conditions and disregulated behaviors that limit or affect engagement in occupation. As participant observers, students will integrate academic experiences with occupational therapy process in settings serving clients with a variety of psychosocial challenges and degrees of disability. Through interactions with clients and staff, students will develop skills in observation of occupational performance, clinical safety, therapeutic communication, clinical relationships, professional behavior, and boundary setting.

OTA-811 OTA LEVEL I B FIELDWORK (INDIAN HILLS CC COURSE)
Lec 0 Clinical 3 Credit 1
This course introduces students to clinical practice for individuals with primary physical disabilities that limit or affect engagement in occupations. As participant observers, students will integrate academic experiences with occupational therapy process in settings serving clients with a variety of physical challenges and degrees of disability. Through interactions with clients and staff, students will develop skills in observation of occupational performance, clinical safety, therapeutic communication, clinical relationships, professional behavior, and boundary setting.

OTA-821 OTA LEVEL I C FIELDWORK (INDIAN HILLS CC COURSE)
Lec 0 Clinical 3 Credit 1
This course introduces students to clinical practice for individuals with mental health conditions and disregulated behaviors that limit or affect engagement in occupation. As participant observers, students will integrate academic experiences with occupational therapy process in settings serving clients with a variety of psychosocial challenges and degrees of disability. Through interactions with clients and staff, students will develop skills in observation of occupational performance, clinical safety, therapeutic communication, clinical relationships, professional behavior, and boundary setting.

OTA-831 OTA LEVEL IIA FIELDWORK (INDIAN HILLS CC COURSE)
Lec 0 Clinical 6 Credit 18
This is the first of two capstone experiences which provide an opportunity for students to integrate and apply specialized occupational therapy theory, skills, and concepts to practice. Students will engage in this learning experience in
a supervised clinical or community setting serving individuals with developmental, physical, or emotional challenges.

OTA-841
OTA LEVEL IIIB FIELDWORK (INDIAN HILLS CC COURSE)
Lec 0  Clinical  Credit 6  18
This is the second of two capstone experiences which provide an opportunity for students to integrate and apply specialized occupational therapy theory, skills, and concepts to practice. Students will engage in this learning experience in a supervised clinical or community setting serving individuals with developmental, physical, or emotional challenges.

Physical Education Activities (PEA)

PEA-187
PE ACTIVITY - WEIGHT TRAINING I
Lec 0  Lab 2  Credit 1
Participation emphasizing physical conditioning, personal habits conducive to physical fitness, individual and team games and hygienic practices with a view toward carry-over value in future leisure time activities. A maximum of 4 semester hours may be earned.

Coaching/Officiating (PEC)

PEC-101
INTRODUCTION TO COACHING
Lec 3  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
Lec 2  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
Lec 1  Credit 1
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.

General Physical Education and Health (PEH)

PEH-102
HEALTH
Lec 3  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
Lec 2  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.

Physical Education Training (PET)

PET-105
BASIC ATHLETIC TRAINING
Lec 3  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
Lec 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
Lec 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-105.

Intercollegiate Physical Education (PEV)

PEV-115
VARSITY BASEBALL
Lec 0  Lab 2  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
Lec 0  Lab 2  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.
VARSITY BASKETBALL, WOMEN
Lec 0  Lab 2  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-130
VARSITY CROSS COUNTRY
Lec 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 the contact hours associated for 2 lab hours. 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 credit hours.

PEV-140
VARSITY GOLF
Lec 0  Lab 2  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
Lec 0  Lab 2  Credit 1
This course provides credit for PEV varsity sports earned by participating as a regular member of a varsity team 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-150
VARSITY SOCCER
Lec 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 the contact hours associated for 2 lab hours. 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 credit hours.

PEV-160
VARSITY SOFTBALL
Lec 0  Lab 2  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
Lec 0  Lab 2  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
Lec 0  Lab 2  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-195
SPORTS MANAGEMENT
Lec 0  OJT 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.

Philosophy (PHI)

PHI-101
INTRODUCTION TO PHILOSOPHY
Lec 3  Credit 3
A topical introduction to the major areas of philosophical inquiry.

PHI-105
INTRODUCTION TO ETHICS
Lec 3  Credit 3
A survey of the major ethical emphases from ancient to modern times with pertinent reading in the works of representative philosophers.

Pharmacy Technician (PHR)

PHR-100
INTRO TO PHARMACY TECHNICIAN (INDIAN HILLS CC COURSE)
Lec 3  Credit 3
This course will provide students with the history of pharmacy, law and ethics of pharmacy, ways to protect patient confidentiality and the different roles of pharmacy technicians. Students will obtain appropriate communication, management and teamwork skills necessary to healthcare field. Safety and infection control policies and procedures, continuing education, and major trends in the pharmacy profession will also be presented.

PHR-110
PHARMACY TECHNICIAN I (INDIAN HILLS CC COURSE)
Lec 3  Credit 3
This course provides the student with the roles and responsibilities of the Pharmacy Technician. The different areas of patient-care settings, dosage forms, abbreviations, referencing, competency, communication, prescription processing, over-the-counter medications, complementary alternative medicine, and hospital pharmacy will be presented.

PHR-115
PHARMACY TECHNICIAN II (INDIAN HILLS CC COURSE)
Lec 4  Lab 1  Credit 5
Prescription processing, repackaging, compounding, aseptic technique, pharmacy stock, billing, and psychopharmacology will be discussed. Body systems and related pharmaceuticals will be examined. Students will be introduced to the basic sciences for pharmacy technicians, pharmacy organizations, and the future of technicians.

PHR-130
PHARMACEUTICAL CALCULATIONS (INDIAN HILLS CC COURSE)
Lec 1  Credit 1
This course provides the student with the knowledge and skill necessary to perform dosage conversions and calculations. The apothecary system, metric system and common household measurements are presented. Mathematical calculations used to determine drug dosage is demonstrated.

PHR-141
PHARMACY OPERATIONS (INDIAN HILLS CC COURSE)
Lec 3  Credit 3
Procurement, billing, reimbursement, inventory management, and patient and medication safety will be discussed. Students will be introduced to tech-check-tech and the future of technicians.

PHR-145
PHARMACY SIMULATION I (INDIAN HILLS CC COURSE)
Lec 0  Lab 2  Credit 1
This simulation experience provides the student with the opportunity to apply knowledge and develop skills as a pharmacy technician in an environment without impact, or potential impact, on patients.

PHR-148
PHARMACY SIMULATION II (INDIAN HILLS CC COURSE)
Lec 0  Lab 2  Credit 1
This advanced simulation experience provides the student with the opportunity to apply knowledge and develop skills as a pharmacy technician in an environment without impact, or potential impact, on patients.

PHR-150
PHARMACY TECHNICIAN PRACTICUM (INDIAN HILLS CC COURSE)
Lec 0  Clinical 6  Credit 2
This course provides students with the opportunity to experience the profession of pharmacy at both community and hospital pharmacy sites. Practicum experiences will help the students decide which area of the profession they would like to pursue at program completion.

Physical Science (PHS)

PHS-120
EXPLORING PHYSICAL SCIENCE
Lec 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
Lec 2  Lab 2  Credit 3
A survey of astronomy including historical considerations, the solar system, the universe and special 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
Lec 3  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
Lec 3  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.

Physics (PHY)

PHY-106
SURVEY OF PHYSICS
Lec 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
Lec 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: MAT-704.

PHY-161
GENERAL PHYSICS II
Lec 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
Lec 4  Lab 2  Credit 5
Classical 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
Lec 4  Lab 2  Credit 5
Classical Physics II 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.

Practical Nursing (PNN)

PNN-160
INTRODUCTION TO NURSING PRACTICE
Lec 2  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

PNN-220
PHARMACOLOGY FOR NURSING I
Lec 2  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
Lec 1  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 beginning the job-seeking skills are addressed. Opportunities for professional growth are explored. Prerequisite: PNN-534. Corequisite: BIO-186.

PNN-534 MEDICAL-SURGICAL NURSING I
Lec 8  Lab 1  Clinical  Credit 12  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, BIO-168 and BIO-173.

PNN-535 MEDICAL-SURGICAL NURSING II
Lec 8  Clinical  Credit 12  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.

Psychology (PSY)

PSY-102 HUMAN AND WORK RELATIONS
Lec 3  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
Lec 3  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
Lec 3  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
Lec 3  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
Lec 3  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.

Paralegal (PRL)

PRL-284 LEGAL ETHICS
Lec 2  Credit 2
This course covers legal ethics with an emphasis on how the rules affect legal administrative assistants. Students learn about the regulation of the legal profession, including the rules of conduct that govern both attorneys and legal administrative assistants. Topics include the meaning and importance of the unauthorized practice of law, the attorney-client privilege and its related work product doctrine, confidentiality, the rules governing conflicts of interest, and other topics relative to ethics in law. Prerequisites or Corequisites: ADM-198 Legal Terminology, ADM-204 Legal Office Procedures.
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
Lec 3 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
Lec 3 Credit 3
The study of interpersonal relations, social attitudes, group dynamics, intergroup relations, class and cultural influence in a psychological context. Prerequisite: PSY-111.

Respiratory Therapy (RCP)

RCP-231
INTRODUCTION TO RESPIRATORY CARE
Lec 3 Credit 3
An introduction to the respiratory care profession. Topics include respiratory care and the healthcare system; the economics, communication, documentation, and evidence-based practice; and the ethical and legal implications of practice. Students will also be introduced to entry level modalities such as oxygen and aerosol therapy. This is a companion course to RCP-232 Respiratory Care Modalities where competencies for this course will be practiced and evaluated in the laboratory or simulation center setting prior to hands-on clinical practice with adult patients in a hospital setting. Prerequisite: Admission to the program. Corequisites: RCP-232, RCP-233

RCP-232
RESPIRATORY CARE MODALITIES
Lec 0 Lab 3 Credit 1.5
This course allows the entry level respiratory care student an opportunity to practice procedures using equipment in the respiratory care lab and simulation center. This is a companion course to RCP-231 and RCP-233, in which competencies related to recall, application, and analysis using respiratory equipment are practiced and tested prior to patient care. Prerequisite: Admission to the program. Corequisites: RCP-232, RCP-233

RCP-233
INTRODUCTION TO CLINICAL PRACTICE
Lec 3 Credit 3
This course focuses on the interaction between patients and the respiratory therapist for the purpose of providing healthcare service(s) or assessing the health status of a patient. Subjects included in this course are infection control, informatics, preparation for patient encounter, taking a medical history, performing a patient interview, cardiopulmonary symptoms, vital signs, physical examination of the chest, evaluation of breath sounds, review and analysis of laboratory studies, and interpretation of ABGs. This is a companion course to RCP-232 Respiratory Care Modalities where competencies for this course will be practiced and evaluated in the laboratory or simulation center setting prior to hands-on clinical practice with adult patients in a hospital setting. Prerequisite: Admission to the program. Corequisites: RCP-232, RCP-233

RCP-350
PHARMACOLOGY
Lec 2 Credit 2
Introduces general pharmacological principles and management relative to the cardiopulmonary system. Includes management and treatment of specific cardiopulmonary disorders and drugs used in advanced cardiac life support (ACLS). Prerequisites: RCP-231, RCP-232, RCP-233. Corequisites: RCP-350, RCP-751, RCP-331, RCP-332

RCP-333
CARDIOPULMONARY PATHOLOGY
Lec 3 Credit 3
This course presents an overview of the pulmonary system. Diagnosis, assessment, treatment and management of the disease processes will be discussed. Prerequisites: RCP-231, RCP-232, RCP-233. Corequisites: RCP-331, RCP-332, RCP-333, RCP-751

RCP-340
CARDIO/PULMONARY DIAGNOSTICS
Lec 2 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-755, RCP-350. Corequisites: RCP-450, RCP-620, RCP-761
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
Lec 1.5 Credit 1.5

RCP-524
RESPIRATORY CARE III
Lec 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-331, RCP-332, RCP-333, RCP-350, RCP-751. Corequisite: RCP-524, RCP-755.

RCP-620
NEONATAL/PEDIATRIC RESPIRATORY CARE
Lec 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-440, RCP-450, RCP-470. Corequisites: RCP-440, RCP-450, RCP-761.

RCP-751
RESPIRATORY CARE CLINIC I
Lec 0 Clinical Credit 5
Learners are assigned to various clinical experiences in the hospital and homecare settings in order to apply principles and skills learned in RCP-331, RCP-332, and RCP-333. Prerequisite: Satisfactory completion of RCP-231, RCP-232, RCP-233. Must be currently enrolled in or have satisfactorily passed RCP-331, RCP-332, RCP-333 and RCP-350.

RCP-755
RESPIRATORY CARE CLINIC II
Lec 0 Clinical 4 Credit 1
Learners are assigned to various clinical experiences within a hospital care setting to apply principles learned in the respiratory curriculum. Prerequisites: RCP-331, RCP-332, RCP-333, RCP-350 and RCP-751. Corequisites: RCP-524 and RCP-470.

RCP-761
RESPIRATORY CARE CLINIC III
Lec 0 Clinical 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-755. Corequisite: RCP-450.

RCP-767
RESPIRATORY CARE CLINIC IV
Lec 0 Clinical 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
Lec 2 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
Lec 2 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.

Reading (RDG)

RDG-045
KEYS TO READING
Lec 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.

Religion (REL)

REL-101
SURVEY OF WORLD RELIGIONS
Lec 3 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.

Science (SCI)

SCI-115
BASIC ELECTRICITY
Lec 1 Lab 2 Credit 2

SCI-123
FORENSIC SCIENCE
Lec 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
Lec 0   Lab 2-6   Credit 1-3
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.

Student Development (SDV)

SDV-108
THE COLLEGE EXPERIENCE
Lec 0   Lab 2   Credit 1
This course is designed to empower new students to successfully transition to college. Students will learn academic success skills, strategies for personal development and exploration, college culture and expectations, and how to access college resources and services.

SDV-125
WORKPLACE READINESS
Lec 1   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
Lec 1   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-148
EDUCATIONAL PROGRAM EXPLORATION
Lec 1   Credit 1
This class assists students in examining post-secondary educational programs as they relate to career choices. The focus is on technical programs, transfer programs, course requirements, career awareness, and educational awareness as they relate to the process of career choices. Self-assessment instruments and/or field trips and/or job shadowing will help identify tentative educational plans and programs to assist students in designing an individualized career plan.

SDV-153
PRE-EMPLOYMENT STRATEGIES
Lec 2   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.

SDV-812
EXPERIENTIAL CREDITS
Lec 0   OJT   Credit 3-9
This supervised internship is designed to provide participation in a living and learning experience through an approved business establishment. This course may not be substituted for program specific internships. The course can be repeated for up to a total of 9 credits.

Social Media Marketing (SMM)

SMM-108
SOCIAL MEDIA ENGAGEMENT
Lec 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 MINIFIELD
Lec 3   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.

Sociology (SOC)

SOC-110
INTRODUCTION TO SOCIOLOGY
Lec 3   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
Lec 3   Credit 3
Conflict Resolution in the Workplace 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
Lec 3   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
Lec 3   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-160
INTRODUCTION TO SOCIAL WORK
Lec 3   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
Lec 0 OJT 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-212
DIVERSITY
Lec 3 Credit 3
This course studies gender, race, class, sexuality and other issues of diversity. The curriculum highlights the duality of oppression and privilege and the ways in which race, gender, class and sexuality shape daily life. Special focus is on learning how to demonstrate course concepts as social action. Social justice is practiced as students become educated in these concepts of diversity and engage in diversity conscious social action.

SOC-230
JUVENILE DELINQUENCY
Lec 3 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
Lec 3 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.

Speech (SPC)

SPC-101
FUNDAMENTALS OF ORAL COMMUNICATION
Lec 3 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
Lec 3 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.

SPC-115
ADVANCED PUBLIC SPEAKING
Lec 3 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 COMMUNICATIONS
Lec 3 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.

SPC-122
INTERPERSONAL COMMUNICATION
Lec 3 Credit 3
Emphasizes group problem-solving, semantics, and communication exercises leading toward better working relationships between individuals. Areas covered for this course would be language theory, nonverbal communication, perception theory, listening, group process and influences.

Web Development (WDV)

WDV-101
INTRODUCTION TO HTML AND CSS
Lec 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-110
INTERNET FUNDAMENTALS
Lec 2 Lab 2 Credit 3
Students will learn about internet connection methods and protocols. Web browser functionality, configuration and use. The use of web services, including advanced searching, email and social networking. How to use web based tools for research and collaboration as well as software development. Web security, including identification of risks, how to limit exposure and measures that can be taken to keep a computer system and personal information secure. Students will also cover the fundamental elements of project management and the importance this plays in the workplace.

WDV-120
INTERFACE DESIGN
Lec 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
Lec 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
INTRODUCTION TO PHP
Lec 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)

WEL-111
WELDING BLUEPRINT READING
Lec 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
Lec 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)
Lec 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-172
ADVANCED SHIELDED METAL ARC WELDING II
Lec 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.

WEL-182
FLUX CORED ARC WELDING
Lec 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
GAS METAL ARC WELDING
Lec 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
Lec 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
Lec 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.

WEL-235
LAYOUT & FABRICATION
Lec 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
Lec 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
Lec 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.