Catalog 2008-2009

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Algonia Campus
2111 U.S. Highway 169 North
P.O. Box 680
Algonia, Iowa 50511
(515) 295-9455  1-877-807-9583
FAX (515) 295-3729

Continuing Education
300 South 18th Street
Estherville, Iowa 51334
(712) 362-7231  1-800-252-5664
FAX (712) 362-3969

Farm Laboratory
4145 360th Street
Emmetsburg, Iowa 50536
(712) 852-3027

Emmetsburg Campus
3200 College Drive
Emmetsburg, Iowa 50536
(712) 852-3554  1-800-242-5108
FAX (712) 852-2152

Estherville Campus
300 South 18th Street
Estherville, Iowa 51334
(712) 362-2604  1-800-242-5106
FAX (712) 362-8363

Spencer Campus
1900 North Grand Avenue, Suite B1
Spencer, Iowa 51301
(712) 262-7141  1-877-807-9585
FAX (712) 262-4047

Administrative Offices
19 South Seventh Street
Estherville, Iowa 51334
(712) 362-2601
FAX (712) 362-0480

Spirit Lake Campus
800 21st Street
Spirit Lake, Iowa 51360
(712) 336-3439  1-877-807-9584
FAX (712) 336-1357

It is the policy of Iowa Lakes Community College not to discriminate on the basis of race, color, religion, age, gender or national origin, political affiliation, disability or any other characteristics protected by applicable law in its education programs, activities, or employment policies as required by Title VI and VII of the 1964 Civil Rights Act, Title IX of the 1972 Educational Amendments, Section 504 of the Federal Rehabilitation Act of 1973 and Title II the Americans with Disabilities Act (ADA) of 1990.

Inquiries regarding compliance with Title IX, Title VI, Title VII or 504 may be directed to Kathy Muller, Human Resources, Iowa Lakes Community College, 19 South 7th Street, Estherville, Iowa 712-362-0433; to the Director of the Iowa Civil Rights Commission, Des Moines, Iowa; or to the Director of the Region VII Office of Civil Rights, Department of Education, Kansas City, Missouri. A formal discrimination complaint process is published in the Student Handbook, Faculty Handbook, and the Board Policies and Administrative Procedures of the College.

All provisions herein contained are subject to change without notice and do not constitute a contract or offer to contract with any person.
The College

The Mission
Iowa Lakes Community College is a public, comprehensive educational institution accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. The college was established in 1967 under provision of Chapters 260C and 260D, Code of Iowa. “To provide opportunities for quality lifelong learning and promote economic development for [the] communities” of northwest Iowa is the mission of Iowa Lakes Community College. Over 72,000 people reside in this predominately rural five-county district encompassing approximately 2,900 square miles. Through its five campuses and an interactive distance learning system, Iowa Lakes currently enrolls more than 3,900 full- and part-time students. The college offers liberal arts, career option and vocational-technical courses leading toward associate degrees, diplomas and certificates. It is committed to continuous quality improvement while serving the changing needs of its constituents.

Iowa Lakes Community College is noted for its innovative and visionary programming. In 1982, it was the second community college in the state to build an Instructional Television Fixed System (ITFS) providing interactive television access to five college sites and 14 secondary schools. In 1993, Iowa Lakes became the first community college to complete a hook-up with the Iowa Communications Network (ICN), a fiber optic interactive video system linking all community colleges and the regents’ universities in the state. This system now links other colleges, public schools, hospitals and government agencies throughout Iowa as well.

In 1985, Iowa Lakes became the first Iowa community college to mandate entrance assessment of all new students. The goal of this assessment program is to help all students be successful in college by ensuring development of minimum competencies in mathematics, writing and reading prior to graduation from Iowa Lakes.

The college offers a variety of outreach services to area communities including a full schedule of continuing education courses, college preparatory courses, support programming, business/industry training and retraining programs, and facilitation of economic development.

Finally, Iowa Lakes collaborates with three four-year institutions offering baccalaureate degree programs to area citizens who are unable to relocate due to job or family commitments.

OPPORTUNITIES
- Extend opportunities for personal and professional growth that are responsive to the dynamic needs of the individual and society.
- Guarantee access to postsecondary education opportunities through an “open door” policy.
- Ensure all constituents have the opportunity and the support necessary to take advantage of the postsecondary education programs and services offered by the college.
- Provide appropriate personnel services.

LIFELONG LEARNING
- Provide learner centered activities that empower individuals to reach their potential and fulfill their personal and career goals.
- Enable students to complete the first two years of college work, including general education and pre-professional education and upon completion to achieve successful transfer to four-year colleges and universities.
- Enable students to complete vocational and technical programs designed to prepare them for employment in occupations in a global society.
- Provide opportunities for individuals to continue learning throughout their lifetime.
- Provide programs for high school completion and development of the academic foundation necessary for success in college.
- Enable eligible secondary students to participate in college courses for credit while still in high school.
- Provide vocational and technical training for persons not enrolled in high school and who have not completed high school.

ECONOMIC DEVELOPMENT
- Support partnerships among business, community and labor groups that strengthen the economic health and quality of life for area residents.
- Deliver programs for in-service training and retraining for workers to help employers maintain a competitive work force.
- Provide economic development assistance to area businesses, industries, cities and counties in cooperation with federal, state and local agencies.

COMMUNITIES
- Promote collaborations with communities that support access to college programs and services with sensitivity to diversity and equal opportunities for all.
- Promote among students an awareness of their responsibilities as citizens in our contemporary and dynamic society.
- Extend the scope of college resources through active partnerships with agencies in the service area.

History
Iowa Lakes Community College was officially organized in 1967 when the first board of directors met to begin planning for the organization and development of the college. Legislation passed by the Iowa legislature established Merged Area III as a part of a statewide plan. This area included all or parts of the counties of Clay, Dickinson, Emmet, Kossuth and Palo Alto and encompassed, at the time, 26 community school districts and two parochial school systems.

In 1968 the board approved the merger of the Estherville Junior College and its facilities into the new district. The college had been operated by the Estherville public schools since its founding in 1924.

The Emmetsburg Community College was merged in 1970 to accomplish the goal of operating two major campuses in the area. The college had been operated since 1930 by the Emmetsburg public schools.

The two largest campuses are located at Emmetsburg and Estherville. Campuses are also located in Algona, Spencer and Spirit Lake.

The Estherville Campus is located in the eastern part of Estherville at 300 South 18th Street. Facilities serve liberal arts, career option, vocational and technical programs.

Vocational, technical, career option, and liberal arts programs and an alternative high school are offered at the Emmetsburg Campus in the northwest part of Emmetsburg at 3200 College Drive.

A facility in Algona was purchased in late 1986 and has been developed into a college campus with facilities for liberal arts courses, community and education services, a success center, and a library. The Algona Campus is located in the northern part
of Algona at 2111 U.S. Highway 169.

The Spencer Campus, located at 1900 Grand Avenue includes facilities for liberal arts, technical, vocational courses, a computer lab, community services, education services, a success center, library, the area small business development center and Retired & Senior Volunteer Program.

The Spirit Lake Campus opened in 1984. In late 1995 the campus moved into new facilities located at 800 21st Street. The new building houses evening and weekend college, liberal arts courses, a computer lab, community services, education services, success center, alternative high school and library.

An instructional television system began offering courses to the area in 1983. Beginning with two channels, six sites and four courses, the system now televises 40 to 50 live college courses per semester to college sites. All courses necessary for a two-year Associate in Arts degree are offered on the system.

The college is also a participant in the Iowa Communications Network which allows sharing classes with other colleges in the state via a state-of-the-art fiberoptic system. A classroom at each campus is equipped for two-way television and audio.

In addition, Iowa Lakes Community College is a member of the Iowa Community College Online Consortium providing extended online learning opportunities to our local service area and beyond through the world wide web, www.iowacconline.org.

The continuing education department uses classroom facilities at college-owned sites and in Area III school districts to deliver instruction and services to local residents.

Governance and Administration

The college is governed by a seven-member board of trustees elected by the residents of Merged Area III. Administrative offices are located at 19 South Seventh Street in Estherville, which houses most members of the President’s Cabinet, central administrative staff and the college administrative computer center.

In addition to the college president, the President’s Cabinet consists of an executive vice president, chief academic officer, executive deans of the Emmetsburg and Estherville campuses, deans of the Algona, Spencer and Spirit Lake campuses, executive director of continuing education/economic development, executive director of planning and development, chief financial officer, executive director of institutional advancement, executive director of plant services and the executive director of marketing.

The President’s Cabinet, along with supervisory personnel from the Administrative Team, manages the operation of the college district.

Accreditation

Iowa Lakes Community College is accredited by the Commission on Higher Learning of the North Central Association of Colleges and Schools, 30 North LaSalle St, Suite 2400, Chicago, Illinois, phone 800-621-7440; the Iowa Department of Education and the State Board of Regents. The college is an institutional member of the American Association of Community Colleges. Programs are approved for veteran’s education and by the U. S. Justice Department, the Federal Aviation Administration and the Iowa Board of Nursing.

STUDENT SERVICES

Admission

Iowa Lakes Community College maintains an open-door policy of admission for students who have the ability, character and preparation to benefit from the educational programs offered at the college. Application forms may be obtained from high school counselors or from any Iowa Lakes Community College campus. Telephone requests may be directed to 1 866-IA LAKES (866/425-2537). Online applications can be made at www.iowalakes.edu.

Admission Policies-Credit Programs

Iowa Lakes admits students to the arts and science, career option, vocational and technical programs who generally have either a high school diploma or its equivalent as determined by the General Education Development (GED) testing program. Individuals who have not completed one or the other may be admitted on an individual basis to various programs offered by the college. The college also offers programs to assist with high school completion or the GED tests.

Admission to the college does not ensure admission to all programs offered at Iowa Lakes. The college reserves the right to guide the placement of students on the basis of counseling, examinations, pre-enrollment interviews and past academic achievement, as well as available space in programs.

All students applying for admission to credit programs at the college must submit a completed Iowa Lakes application form, a transcript of high school work or GED certification and official transcripts sent directly from each postsecondary institution of higher education attended. Basic skills assessment of English, reading and mathematics is done with every entering student at Iowa Lakes. The tests used are ASSET, COMPASS and the ACT. Those who are underprepared for college level courses may need to take courses to develop these skills further before entering college English or mathematics. Nursing applicants must submit ACT program scores and attend an advising session. Some programs require medical examinations, and other assessments before admission and/or advance fee deposits.

Applicants will be notified of their admission to the college by the dean of enrollment management.

Readmission

Students who have formerly attended Iowa Lakes Community College and who wish to return after an absence of a term (other than the summer session) should apply for readmission at the admission office of the campus they plan to enter. Students readmitted after an absence will be required to fulfill current graduation requirements.

Transfer Students

Transfer students must complete all admission requirements including submission of official transcripts directly from every postsecondary school or college attended whether or not credit was earned.

International Students

A student from another country must complete a special application form which is available from the admission office. Official transcripts of all secondary school and higher education records must be sent directly to the admission office. Notarized translations must be included for non-English language records.

Transcripts must include specific dates of school attendance, courses taken during each year of attendance, grades and the grading scale used. The college may use the services of a service bureau to help in evaluating transcripts from other countries; charges are paid by the applicant. Students whose native language is not English must submit evidence of their English proficiency by a score of 500 or above on the Test of English as a Foreign Language (TOEFL) in its paper form. A score of 173 or more is required on the computer version of the TOEFL.

International students must submit evidence of financial ability
to meet college and living expenses during the first year of attendance. A financial status questionnaire, available from the admission office, must be completed before an immigration I-20 form will be issued. Visa regulations of the U S Department of Immigration and Naturalization must be followed.

**Admission-Continuing Education**

Admission to continuing education programs is varied and flexible. Adults are encouraged to enroll regardless of past educational achievement or number of years of formal education. Enrollment in adult basic education, high school completion, general adult education, adult vocational supplementary education, adult vocational short courses or professional continuing education is accomplished by contacting the continuing education office at 712/362-7231 or 800/252-5664.

**Residency Requirements**

Students enrolling at Iowa Lakes Community College are classified as residents or non-residents for admission, tuition and fee purposes. Each student must declare residency correctly under applicable rules and laws of the state of Iowa as well as the policies of the college board of trustees. The primary determination of residency is the reason a person is in the state of Iowa; the second determination is the length of time the person has resided in Iowa. If a person is in the state primarily for educational purposes, that person will be considered a non-resident.

Students who have been classified as non-residents, and who believe they should be eligible for resident tuition, may apply for reconsideration of their cases. The director of records and registration (Registrar) may require two or more written documents, affidavits and other evidence considered necessary to establish the residency of the student. This may include voter registration information, driver’s license, motor vehicle registration, an Iowa state income tax return, proof of Iowa homestead credit on property taxes, signed and notarized documentation from an employer verifying employment in Iowa, or a signed and notarized statement from the student describing employment and sources of support. Documentation must verify residency within the state of Iowa for at least 90 days prior to the term for which the student is enrolling.

Residence for college enrollment and fee purposes may be different from residence for other purposes. The burden of establishing exemption from non-resident status is with the student. The complete Uniform Policy on Student Residency Status is available from the registrar or from the State Board of Education.

An adverse decision by the director of records and registration may be appealed. The Academic Review Committee acts as the appeals body for residency questions. The decision of the committee is final.

An application form and further information is available from the records office at Emmetsburg or Estherville. A change of status is effective for the next term following the change.

**ADVANCE REGISTRATION AND ORIENTATION**

**Advance Registration**

Registration for new freshmen takes place at Iowa Lakes during the summer. Iowa Lakes recognizes that the hectic fall registration procedure can be an unsettling, bewildering experience for a new student. The college has established an early registration date when family and friends are encouraged to accompany the student. Processes of advising and registration are accomplished in a convenient manner.

**New Student Orientation**

At the advance registration and orientation sessions, each student is assigned an academic advisor. Many students come to Iowa Lakes with a particular program of study in mind; these students are assigned advisors in those programs. Other students are undecided about their future. In such cases, students are encouraged to access the Career Resource Centers located in Estherville and Emmetsburg. Career interest assessment, career resource libraries and individual appointments with advisors/counselors may help clarify academic and career goals.

Orientation continues during the first day of the term. Payment of tuition and fees is the final step in registration. The orientation process continues through the term and ends with scheduling, registration and payment of tuition and fees for the next term. All new freshmen who register as full-time day students must register for College 101.

**STUDENT RESPONSIBILITY FOR COLLEGE INFORMATION**

Each student is responsible for information appearing in the catalog, student handbook and other college publications. Failure to read the regulations and other information will not be considered an excuse for noncompliance. The college reserves the right to change policies or to revise curricula as necessary due to unanticipated circumstances. Program or course availability may be affected by enrollments, funding, or instructor availability.

If a student feels that extenuating circumstances might justify the waiver of a particular college policy, procedure, or regulation, a petition may be filed according to established procedures. Contact the director of records and registration for information. Each student’s assigned college e-mail address will be used for all official college business.

**Class Attendance**

To help ensure academic success, students are expected to attend all class meetings for the courses in which they have enrolled. Any absence, regardless of the reason, results in the loss of instruction and interferes with the learning process. Absence does not lessen the student’s responsibility for meeting the requirements of any course and it is the student’s responsibility to complete the work missed. The specific attendance and make-up policies of each instructor are contained in course orientation information and/or course syllabus. Students are expected to complete all class assignments and examinations on time. When a student anticipates missing a test or a class, a telephone call in advance to the instructor may save a great deal of difficulty later.

**Academic Honors**

The deans’ honors list is published each term which includes names of those full-time students (12 or more graded credits) who have earned a grade point average of 3.25 to 3.99. Students with a 4.00 grade point average are placed on the college president’s honors list. The lists are released to area news media.

Candidates for graduation who have earned a cumulative grade point average of 3.25 or higher are honored at the commencement ceremony by identifying their honors in the printed program. Three classes of recognition are indicated:

- Cum laude 3.25 - 3.49
- Magna cum laude 3.50 - 3.74
- Summa cum laude 3.75 - 4.00
Gratuation honors are also posted on the academic record based on the final cumulative GPA.

**ACADEMIC PROBATION AND RETENTION**

Iowa Lakes Community College provides assistance to students to help them to succeed academically. The purpose of academic probation at Iowa Lakes is to indicate the need for special or individualized help for the student who has academic difficulty. The college is concerned when a student has problems and faculty and staff are available to provide assistance. Academic probation is somewhat different from financial aid probation, which is also covered in this catalog.

**Academic Probation Statuses**

A status of **probation** means that the student and advisor must meet to determine what course of action will lead to success during the next enrollment period. **Strict probation** means that the student may continue enrollment only with a written contract for performance; failure to meet the terms of the contract results in immediate suspension from classes. Participation in Strategies for Academic Success (or an alternative assignment approved by the facilitator) is usually required of students on strict probation, except during the summer term. **Suspension** means that a student is prohibited from attending classes and is dropped from all courses. A suspension is for a full semester; a second suspension is for a year. A semester is counted if the student is enrolled for six or more credits.

After the first semester in college, a new freshman will be placed on **probation** if the GPA is less than 1.50. The student will be placed on **strict probation** if the GPA is less than 0.80. After more than one semester in college, a student will be placed on probation if the cumulative GPA is less than 2.00. A student with more than one semester in college will be placed on **strict probation** if the cumulative GPA remains less than 2.00 or if the term GPA is less than 1.00 and the cumulative GPA drops below 2.00.

A student on **strict probation** will be suspended if the term GPA is less than 2.00.

A student on **probation** or **strict probation** may continue enrollment if the term GPA is 2.00 or better, even if the cumulative GPA does not reach 2.00.

A student who earns a cumulative GPA of 2.00 or better will be returned to academic good standing. The Academic Review Committee will review records of students on continued probation and may revise status based on further information such as absences, excessive number of ‘I’, ‘Q’ or ‘W’ grades, etc. Transfer students will be placed on probation if a similar record at Iowa Lakes would result in a probationary status.

**FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS STANDARDS**

**General Information**

The U.S. Department of Education requires each institution to establish and consistently apply standards of reasonable academic progress to all students who want to establish or maintain financial aid eligibility. This federal requirement indicates that students must maintain satisfactory progress toward their degree objectives in order to receive financial aid. Iowa Lakes Community College has established their standards, which are based on qualitative and quantitative measures. They require students to:

1. Maintain a minimum cumulative grade point average at the completion of each term.
2. Maintain a specific cumulative number of hours earned at the end of each term.
3. Achieve their program completion within 150% of the published length of the program in credit hours attempted:

**Maximum Time Frame Requirement**

You will not be eligible to receive financial aid once you have attempted more than 150 percent of the normal credits required for your degree or diploma program, or once it becomes clear that you cannot mathematically finish the program within the 150% maximum time frame. (For example; programs requiring 60 credit hours for graduation, 90 credit hours would be the 150% program maximum.) All attempted hours are counted, including transfer hours, whether or not financial aid was received or the course work was successfully completed. Standards are established as minimum requirements for students who receive financial aid from any federal, state, and institutional programs administered by Iowa Lakes Community College.

**Making Progress Toward a Degree**

Students must maintain a minimum 1.75 cumulative G.P.A. at the end of the first term of enrollment. Each subsequent term after the first, students will be required to maintain a 2.0 cumulative G.P.A.

The student must successfully complete 70% of their attempted credit hours. Successful completion of courses are defined as receiving a grade of A,B,C,D, or P. Courses receiving grades of F,I,W,K,Z or Q are not counted as completed grades. Students must complete their program requirements within a time frame equivalent to 150% of their program length and/or credit hours required for graduation purposes. Transfer credits attributable to the student’s degree will be evaluated to determine the student’s Satisfactory Progress status.

**Satisfactory Academic Progress Probation Status**

Students are placed in a probation status the first time they do not meet the minimum cumulative grade point average and/or cumulative hours earned requirement. During the probation term, students remain eligible to receive financial aid. To remain eligible to receive financial aid in future terms the student must, during the probation term:

1. Increase their cumulative grade point average to meet the minimum grade point average.
2. Successfully complete all courses attempted with grades of A,B,C,D, or P.

**Satisfactory Academic Progress Continued Probation Status**

If a student meets the course completion requirement of #2 of the probation status but still does not have the required cumulative grade point average he/she will be placed in a continued probation status for the next term of enrollment. The student will be required to raise the cumulative grade point average to the required minimum during the continued probation term or be placed in an ineligible status.

During the continued probation term the student will be eligible to receive financial aid.

**Satisfactory Academic Progress Ineligible Status**

Students are declared ineligible for financial aid if they:

1. Do not meet the probation status requirements as listed above.
2. Do not achieve their program objectives within 150% of the published time frame of the academic program as measured in credit hours.
3. Complete the semester with letter grades of “F”.
4. Complete the semester with a G.P.A. of 0.0.
5. Completing 0.0% of their attempted credit hours.

Regaining Eligibility
1. Students may earn the necessary grade point average or semester hours while not receiving financial aid (enrolled at their own expense).
2. Students may submit written appeals documenting extenuating circumstances that prevented them from meeting the standards. Appeals should be submitted to the Financial Aid Office at Emmetsburg. Decisions on appeals will be made and the decision will be communicated to the student within 15 working days of receipt of the appeal. When appeals are approved, students are given specific requirements to meet. Students who do not have appeals approved are declared ineligible for financial aid.

Monitoring of Academic Progress
The academic progress of financial aid recipients is reviewed at the end of each term. Students will be notified of status changes by letter.

New Start
Iowa Lakes Community College offers a “New Start” program for students a) who change programs of study after receiving unsatisfactory grades in a previous program at Iowa Lakes Community College; or b) who re-enroll at the college in the same program after an absence of at least two years.

It allows the student to begin a new cumulative grade point average from the beginning of the re-enrollment or from the beginning of the new program. A change to a new program of study is defined as a change in declared major program, such as changing from arts and sciences to a vocational program, or changing from one vocational program to another vocational program.

A “New Start” means that all academic work completed prior to the designated “New Start” term will appear on the academic record but will not be considered for use in the cumulative grade point average.

The “New Start” is a one time only option. If a student experiences difficulty in the new program, the student may not apply for a second “New Start”. No grades are removed from the transcript by this program. Passing grades of ‘C’ or better earned prior to the “New Start” for courses which apply to the new program may be used in meeting graduation requirements but will not be calculated in the student’s cumulative grade point average.

Since this program applies to Iowa Lakes Community College only, it will generally not affect decisions made by transfer institutions or grantors of financial aid. Such agencies will likely consider the student’s complete academic record, not just the “New Start”.

A “New Start” petition must be filed in the Records Office before or during the first term of enrollment in the new program, or after the return to a former program following the required absence. The petition for a “New Start” will be reviewed by the Records Office and will be implemented if the student has met all the guidelines. The student may appeal the denial of a “New Start” petition to the Academic Review Committee as provided by the academic appeal procedures listed in the student handbook. Once granted, the “New Start” may not be rescinded.

ACADEMIC SUPPORT PROGRAMS

Advisors
Advisors who teach in the students’ major area of interest help to guide academic programs and achieve educational goals. Students are encouraged to visit advisors.

Libraries
The mission of the campus libraries is to support the educational programs of the college. The libraries are comprehensive centers designed to meet the diverse needs of students, faculty, staff and area residents.

Developmental Studies
As an open door institution, Iowa Lakes Community College recognizes that some students may need assistance in basic skills areas. New students are assessed in English, reading and mathematics. Students who have been underprepared or who have been out of school for several years may need to review and sharpen basic skills prior to entering required college courses.

Developmental studies classes are designed to allow students to succeed in the programs they choose. These courses, however, do add an extra load to student requirements and may extend the program of study and/or require attendance at summer sessions. Questions concerning developmental studies should be discussed with advisors, Success Center instructors or deans.

ASPIRES
A federally funded student support service program is available at Iowa Lakes. This program targets first generation, income eligible and disabled students. Services focus on increasing student success in college, including tutoring, college visits for transfer students, counseling and academic advising, plus general support.

Tutoring
Peer tutoring is available to all students on request through the Success Centers.

STUDENT ASSISTANCE SERVICES

College Counseling Services
Through Student Services the college provides support and assistance. Access to professionally trained specialists for academic, career and social counseling is provided in addition to educational guidance. Career guidance and appropriate testing are also available. Concerns may be discussed in confidence as the need arises.

Student Handbook
The student handbook helps students to become informed about the programs and services available at the college. A calendar and more detailed information about student life and college procedures are provided in a handy guide which is usually distributed during the orientation period at the beginning of the term.

Veterans’ Services
Services to veterans of the U.S. armed services are provided through the financial aid office. Qualified veterans are eligible to receive educational benefits in approved programs in all areas.
Students with Disabilities
Accommodations are provided based on student need. Services such as tutoring, counseling, note taking, readers and special equipment can be provided. All services are based on requests for services and appropriate documentation provided by the student. For more information, contact the accommodations person, Diana Refsell, at 712/852-5219 or drefsell@iowalakes.edu.

Rehabilitation Services
An office of the state Department of Vocational Rehabilitation Service is available on campus in Emmetsburg and Estherville to assist clients of the program.

Student Housing
Housing at Iowa Lakes includes both on- and off-campus units. In Emmetsburg, Estherville, and Spencer there is off-campus housing for students. Lists of available housing are compiled by the housing offices. The college does not maintain an “approved” list but only provides information on availability. For information about housing, contact the director/coordinator of housing at either the Emmetsburg, Estherville, or Spencer campus. All students residing in college housing are required to participate in sessions pertaining to group living skills. To live in campus housing, students must be a full-time Iowa Lakes student enrolled in 12 or more hours.

Student Centers
The student centers at Emmetsburg and Estherville are the social, cultural and recreational hubs of the college. A cyber café, meeting rooms, television and game areas are provided. Student areas are available at Algona, Spencer and Spirit Lake.

The student centers offer a wide variety of food services ranging from cafe service and cafeteria meals to catered meals for dinners. Breakfast, noon and evening meals are served Monday through Friday in Emmetsburg and Estherville.

Campus Housing and Food Service Refunds
Students living in campus housing units who withdraw from college, who are asked to withdraw from college, or who move out of student housing for any reason still contractually owe rent for the remainder of the term unless they find a replacement approved by the college. The room deposit will be refunded or applied toward unpaid rent if there are no damages and the proper forms are completed.

During regular terms, three meals per day are served. Weekend meals are available upon request. Meal cards may be purchased by those students without a meal contract who do not wish to carry cash. Cash is always accepted. Refunds will be calculated on a per diem basis. Only students who officially drop the meal plan at the business office will be eligible for a refund. Refunds will be prorated from the 1st and the 15th of each month. Individuals with questions should contact the food service.

College Stores
College bookstores are located in Emmetsburg, Estherville and Spencer. Hours for Emmetsburg and Estherville are Monday – Thursday 8-4:30; Friday 7:30-4; summer hours are posted. Hours in Spencer are Monday – Thursday 8-1 with extended hours at the beginning of each semester. When purchasing books, students are asked to bring their registration form to assist in speeding up the purchase of books. Instructors select required textbooks. New book prices are determined by publisher prices. Payment is due at time of purchase. If a voucher is approved by Financial Aid, the voucher is accepted at the bookstore for a specific time only. Returns are accepted only with an add/drop slip, then only for the first week of classes. Books with shrink-wrap cannot be returned if removed from wrap. If the book contains a CD or access code, please do not break the seal until you are certain you will remain in the class, since copyright laws do not allow the bookstore to make a refund if those items are used. Buy back days are the last five days of each semester and the last day of each summer session. All supplemental materials must be included with books when they are returned. The bookstores also sell supplies and college-identified items.

Pell Grant
A Federal Pell Grant, unlike a loan, does not have to be repaid. Pell Grants are only awarded to undergraduate students who have not earned a bachelor’s or professional degree. For many
students, Pell Grants provide a foundation of financial aid to which other aid may be added.

**Federal Supplemental Educational Opportunity Grant (FSEOG)**
A FSEOG is for undergraduates with exceptional need, that is, students with the lowest Expected Family Contributions (EFC), and gives priority to students who receive Federal Pell Grants. FSEOG does not have to be paid back.

**Federal Loans**
A Subsidized Loan is awarded on the basis of financial need. If you qualify for a subsidized loan, the federal government pays interest on the loan ("subsidizes" the loan) until you begin repayment and during the authorized periods of deferment thereafter. An Unsubsidized Loan is not awarded on the basis of need. If you qualify for an unsubsidized loan, you will be charged interest from the time the loan is disbursed until it is paid in full. You can choose to pay the interest or allow it to accumulate. If you allow the interest to accumulate it will be capitalized, that is the interest will add to the principal amount of your loan and will increase the amount you have to repay. If you pay the interest as it accumulates, you will repay less in the long run.

**Alternative Loans**
Alternative Loan Programs are education funding opportunities that partner with students, colleges, and educational funding organizations such as banks to provide private loans to students and families who do not qualify for adequate amounts of state and federal student aid. Loan funds must be used for educational expenses (tuition, room, board, computer, etc.) or as determined by the school. See the financial aid office for information and/or counseling on whether Alternative Loans are the best option to fulfill your financial aid needs.

**Parent Loan for Undergraduate Students (PLUS)**
Parents may borrow for dependent undergraduate, graduate or professional students up to a maximum which equals the cost of the student's program each year.

**Work-Study**
The work-study program provides jobs for students with financial need to earn money to help pay education expenses. The program encourages community service work related to your course of study.

**Iowa Vocational-Technical Tuition Grant (IVTG)**
Need-based grants are available to Iowa resident full-time vocational, technical, and career option students at the area community colleges.

**Other Financial Aid**
Assistance to students needing help in financing education is also provided through veterans’ services, vocational rehabilitation, Job Service, Work Force Investment, and the Iowa National Guard.

**Scholarships**
A number of scholarships are available at Iowa Lakes Community College. An application and information concerning eligibility are available from the Institutional Advancement Office or the Financial Aid Office. Financial need may be a qualification for some scholarships. Other scholarships are available to students through local civic and community organizations.

**Presidential Scholar Honors Program**
This program is an academic challenge structured for talented students. Freshman applicants recognized as honor students in high school, and returning sophomore honor students who have a cumulative average of 3.50 or above are invited to be members of the Presidential Honors Program.

Awards range from 60 percent to 100 percent tuition, depending upon qualifications. Members gather periodically to take part in cultural, intellectual, and aesthetic activities. They can qualify for Presidential Scholars recognition at commencement exercises.

**STUDENT LIFE**
The Iowa Lakes Community College experience is not by any means restricted to the classroom. Students participate in many co-curricular activities that are very much a part of their learning and growth. Since many of these activities, such as athletics and music, have headquarters at the Estherville campus, transportation is provided from other campuses when needed.

**Athletics**
The athletics program at Iowa Lakes Community College is an integral part of the total educational program. The program promotes physical growth and fitness, provides organized intercollegiate sports competition for student participation and community involvement, and allows a competitive feeling of achievement through sports participation. Intercollegiate athletics operate through the Estherville campus for students at any campus. Intramural athletics provide organized competition, individual tournaments and outdoor recreation for all students. Opportunities for fun, enjoyment and fellowship through participation in sports activities are sponsored at both Emmetsburg and Estherville.

**Communication**
Students majoring in mass communications — writing, editing, photography, layout — are responsible for the "Spindrift," the college newspaper. All students are invited to participate. An annual publication, "Prairie Smoke," features student poetry, short stories, essays, art and photography. All students are invited to submit work to "Prairie Smoke."

Students interested in speech and debate find opportunities for competition with other colleges. Broadcasting students air various television and radio shows. A variety of college events are also broadcast live over the internet through webcasting.

**Music**
Iowa Lakes has numerous vocal and instrumental ensembles as well as recitals and coffeehouses to provide students with extensive solo or group performance opportunities. The music organizations in which students may participate are concert band, concert choir, jazz band, jazz singers, handbell choir, men’s choir, women’s choir, woodwind ensemble, brass ensemble, and percussion ensemble. Opportunities for private lessons on piano, guitar, voice and many other instruments are available. Lessons are taught by highly qualified faculty. Lessons are open to all students and community members contingent upon the availability of faculty. The college also sponsors invitational jazz band contests, swing choir/jazz choir festivals and jazz band clinics which feature nationally known clinicians.
Student Organizations
The college encourages students to be active in college clubs and organizations. More than 30 student organizations reflect the wide range of student interest in pre-professional, social and special interest groups. A variety of clubs and organizations are available for student participation.

Student Government
Through the student senate, students are provided an opportunity to participate in the operations of the college, both academically and socially. The senate’s objectives include providing a comprehensive activities program; addressing issues brought to it by students; encouraging the interaction and cooperation of students; and providing leadership in issues of citizenship and student rights.

STUDENT RIGHTS AND RESPONSIBILITIES
Academic institutions exist for the transmission of knowledge, the pursuit of truth, the development of students and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals.

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus and in the larger community. Students should expect to exercise their freedom with responsibility. Those rights and responsibilities are published in the Student Handbook along with due process procedures for disciplinary actions.

Drug Prevention Program
Iowa Lakes complies with the Drug Free Schools and Communities Act of 1989 (PL 101-226) and provides a drug free institution that prohibits employees and students from unlawfully manufacturing, distributing, dispensing, possessing or using a controlled substance on its property or during any of its activities. Details on standards of conduct, legal sanctions, health risks and referral agencies are published in the Student Handbook or are available from campus business offices.

Crime Prevention on Campus and Completion/Graduation Rates:
The Student Right to Know and Campus Security Act of 1990 (PL 101-542), require colleges to collect, publish and distribute certain information concerning policies and procedures, including statistics relating to campus security and criminal actions on campus. This information is provided to all current students and employees in the Student Handbook and to applicants for admission or employment on request.

Additionally, the law (as amended by PL 102-26) requires colleges to report their completion/graduation rates on an annual basis, as well as specific information concerning athletics. This information is also published in the Student Handbook.

Institutional Record of Student Complaints
To comply with federal regulations, the college maintains records of formal, written student complaints filed with the offices of the chief executive officer, the chief academic officer, or the chief student services officer. These records will be maintained in the office of the dean of enrollment management.

Policy of Nondiscrimination
It is the policy of Iowa Lakes Community College not to discriminate on the basis of gender, race, national origin, creed, age, marital status, disability or any other characteristics protected by applicable law in its education programs, activities, or employment policies, as required by Title VI and VII of the 1964 Civil Rights Act, Title IX of the 1972 Educational Amendments, Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

Inquiries regarding compliance with Title IX, Title VI, Title VII, or Section 504 may be directed to Kathy Muller, Affirmative Action Officer, Iowa Lakes Community College, 19 S. Seventh Street, Estherville, IA 51334, telephone (712)362-0433; to the Director of the Civil Rights Commission, Des Moines, Iowa; or to the Director of the Region VII Office of Civil Rights, Department of Education, Kansas City, Missouri. A formal discrimination complaint process is published in the Student Handbook, Faculty Handbook, and the Board Policies and Administrative Procedures of the College.

The Academic Year
The academic year for college transfer and career option consists of two semesters, beginning in August or September and in January, plus a summer session. The academic year for vocational and technical students normally consists of two semesters plus a summer term.

Continuing education programs are organized and scheduled to meet the needs and convenience of those requesting the programs.

Unit of Credit
The unit of college credit is the semester hour. A semester hour of credit is normally given for a minimum of one academic hour of classroom work for each week of the semester, two hours of scheduled laboratory work, three hours of scheduled clinical practice, or four academic hours of scheduled work experience, or the equivalent.

Classification of Credit Students
Freshman: a student who has completed fewer than 30 semester credits.
Sophomore: a student who has completed 30 or more semester credits.
Full-time: a student carrying 12 or more credits of college work in a regular term. Veterans must carry 12 or more hours to qualify for full educational benefits.
Half-time: a student carrying six or more credits of college work in a regular term.

CREDIT LOADS
Fall/Spring Terms
A liberal arts student may register for up to 19 credits if the previous term’s GPA was 2.50 or better; up to 21 credits if the last term’s GPA was 3.50 or better. A student is limited to 18 credits or less if the previous term’s GPA was between 1.50 and 1.99 and limited to 12-14 credits or less if the previous term’s GPA was less than 1.50. A liberal arts student on strict probation will be restricted to 12-14 credits. Students in vocational or technical programs may take the amount of credit required for the program each term.

Summer Term
A student may register for up to 12 credits. For both first and second session courses a student may register for up to 6 credits.

A student may appeal the credit load restriction by preparing a written petition stating the reasons for the proposed exception, securing the signed consent of the faculty advisor and presenting the petition to the director of records and registration at least three days before the last day to add a course in a term.
Grading System
Grades are based on students' levels of achievement in those courses in which they enroll. The following scale is used:

**Grades for courses with attempted credits which count toward the grade point average:**

- **A**: 4 honor points
- **B**: 3
- **C**: 2
- **D**: 1
- **F**: 0

**Grades for courses with no attempted credits which do not count toward the grade point average:**

- **P**: pass
- **Q**: not passing
- **T**: credit for testing
- **L**: credit for experiential learning

Other grade symbols which earn no credits or honor points:

- **I**: incomplete
- **W**: withdrawn
- **N**: audit
- **X**: repeated course (does not figure into GPA)

**Grade descriptions:**

- **A**: excellent
- **B**: above average
- **C**: average
- **D**: below average
- **F**: fail: counts as attempted credit, no honor points.

I: incomplete: assigned in cases where the student has not completed some portion of assigned course work during a regular term for extenuating circumstances such as illness, family emergency, etc. A change of grade will be accepted up to the end of the next term following the term in which the grade is issued.

W: withdrawn: course formally dropped after the end of the first week of a term.

N: audit: course taken for personal interest only; does not earn credits or grade. Must be elected during the first two weeks of a term.

P: pass: course has been elected to be taken on a pass/no credit basis during the first two weeks in a term. Only one course may be so elected each term, except that all courses designated as developmental may be elected as pass/no credit. In addition, some courses are offered only on a pass/no credit basis. No more than one-fourth of the total credits required for graduation may be earned with P grades. A course which is being repeated may not be elected on a pass/no credit basis. Does not count as attempted credit.

Q: not passing: a failing grade which earns no credit; can be issued only when a course is taken on a pass/no credit basis. Does not count as attempted credit.

Mid-term temporary grades are distributed to students through advisors at the middle of each regular semester. Final grades are available to students through WebAdvisor at www.iowalakes.edu. Students who would like grades mailed must make that request to the Records Office each academic term. The college may also send grades for Postsecondary Enrollment Option students to the high school.

**Graduation**
Candidates for graduation must complete an application for graduation in order to receive their diploma. Students who do not complete requirements for graduation in the term for which they applied must submit a new application. Students who plan to participate in one of the annual commencement ceremonies must indicate their intent on the application for graduation. There is no graduation fee. Students who plan to receive more than one degree, diploma or certificate need to complete a graduation application for each program. The graduation application is available online at https://www.iowalakes.edu/registrar/graduation_application.htm.

The graduation application should be completed by the following dates:

- **Fall**: October 1
- **Spring**: February 1
- **Summer**: June 1

Commencement ceremonies are held at the end of the spring and summer terms. Students who graduate at the end of fall are invited to participate in the annual commencement ceremony in May. Participation in commencement ceremonies is free of charge.
DEGREES, DIPLOMAS AND CERTIFICATES

Iowa Lakes Community College awards degrees, diplomas, and certificates to those individuals who successfully complete programs in arts and science, career option, vocational, technical or continuing education areas. The following degrees are awarded for college credit two-year programs: Associate of Arts, Associate in Science, and Associate in Applied Science. Diplomas are awarded for college credit vocational and technical programs of less than two years duration.

To be eligible for a degree or diploma in a credit program, a student must complete the last 15 credits before graduation in courses taken at Iowa Lakes. Certificates are issued to students who complete program requirements.

The General Education Core

General education is intended to provide breadth of learning to the community college experience. General education imparts common knowledge, promotes intellectual inquiry and stimulates the examination of different perspectives, thus enabling people to function effectively in a complex and changing world.

General education is not exclusively related to a student's technical, vocational or professional field but is a part of a degree or diploma that prepares all students to meet personal, social and lifelong learning needs.

At Iowa Lakes Community College, general education encompasses curricular patterns and/or cognitive experiences appropriate to the length and content of the prescribed program. The general education requirements include college-level experiences which develop student capabilities in, and understanding of, (a) oral and written communication; (b) critical thinking; (c) numerical data; (d) scientific inquiry; (e) ethical, global, historical and social issues; and (f) appreciation for the fine arts.

The general education component at Iowa Lakes is developed at the institutional level through the faculty governance structure, using criteria appropriate to the institution's mission, state guidelines and requirements of applicable accrediting bodies. Iowa Lakes Community College will continually clarify, articulate, publicize and assess its general education program. The general education requirement varies in accordance with the specific degree or diploma program in which the student enrolls.

Associate in Arts Transfer Degree Requirements

The Associate in Arts degree is designed to provide the first two years of a typical college or university bachelor's degree program in liberal arts, general education, or pre-professional studies. Completion of the degree will satisfy all of the general requirements at several area colleges and universities and many of the requirements at other schools. To earn the Associate in Arts transfer degree, a student must:

- Earn a minimum of 64 semester credits, of which not more than 16 may be vocational or technical credits used as general electives and which may not be developmental education credits.
- Earn a minimum cumulative grade point average (GPA) of 2.00 or higher, using Iowa Lakes grade points earned divided by Iowa Lakes credits attempted for a standard letter grade, as defined elsewhere in this catalog.
- Complete the following general requirements, totaling 40 or more semester credits:

Communications (10 semester credits):
- ENG-105 Composition I .................................................. 3
- ENG-106 Composition II ................................................. 3
- SDV-103 Successful Learning ........................................... 1
- SPC-101 Fundamentals of Oral Communication .................. 3

Science (8 or more semester credits)
- BIO-102/105 Introductory Biology .................................... 3,4
- BIO-112 General Biology I ............................................ 4
- BIO-113 General Biology II ............................................ 4
- BIO-141 Ecology & Environmental Concepts ....................... 4
- BIO-163 Essentials of Human Anatomy & Physiology ............. 4
- BIO-168/173 Human Anatomy & Physiology I/II .................... 4
- BIO-186 Microbiology ................................................... 4
- BIO-248 Introduction to Bioscience ................................... 4
- BIO-300 Field Biology & Lab .......................................... 4
- CHM-151 College Chemistry I ........................................ 4
- CHM-152 College Chemistry II ....................................... 4
- CHM-166 General Chemistry I ......................................... 5
- CHM-176 General Chemistry II ......................................... 5
- CHM-190 Introduction to Forensic Chemistry ......................... 4
- EVS-114 Environmental Studies I ..................................... 4
- EVS-124 Environmental Studies II .................................... 4
- PHS-113 Introduction to Physical Science ............................ 4
- PHS-166 Meteorology, Weather & Climate .......................... 4
- PHS-187 Introduction to Earth Science ................................ 4
- PHY-162/172 College Physics I/II .................................... 4
- PHY-212/222 Classical Physics I/II .................................... 5

Mathematics (5 or more semester credits)
- MAT-110 Math for Liberal Arts ......................................... 3
- MAT-120 College Algebra ................................................ 3
- MAT-127 College Algebra & Trigonometry ............................ 3
- MAT-140 Finite Math ..................................................... 3
- MAT-156/157 Statistics OR MAT-120 College Algebra .......... 3
- MAT-140 Finite Math ..................................................... 3
- MAT-156/157 Statistics OR MAT-120 College Algebra .......... 3
- MAT-191 Calculus I ...................................................... 5

(some transfer colleges have higher minimum requirements, such as MAT-127)

Social Science (9 semester credits from two or more areas)
- HIS-110/111 Western Civilization ...................................... 3
- HIS-285 Classical Heritage ............................................. 3
- HIS-151/152 U.S. History ................................................ 3
- PSY-111 Intro to Psychology ............................................ 3
- PSY-121 Developmental Psych. ........................................ 3
- PSY-211 Psychology of Adjustment .................................... 3
- PSY-241 Abnormal Psychology ........................................ 3
- PSY-251 Social Psychology ............................................. 3
- ECN-120 Principles of Macroeconomics .............................. 3
- ECN-130 Principles of Microeconomics .............................. 3
- SOC-110 Introduction to Sociology .................................... 3
- SOC-115 Social Problems ............................................... 3
- POL-111 American National Government ............................. 3
- POL-112 American State & Local Government ....................... 3
- ANT-105 Cultural Anthropology ....................................... 3
- GEO-121 World Regional Geography ................................. 3
- HIS-201 Iowa History ................................................... 3
- MMS-101 Mass Media .................................................... 3
- POL-110 Introduction to Political Science ........................... 3
- SOC-120 Marriage and Family .......................................... 3
- SOC-186 Contemporary Global Issues ................................ 3
- SOC-200 Minority Group Relations .................................... 3
### Associate in Science Transfer Degree Requirements

The Associate in Science Transfer degree is designed to provide the first two years of a typical college or university bachelor's degree program in mathematics, science, technical or pre-professional studies. Completion of the degree will satisfy all of the general requirements at several area colleges and universities and many of the requirements at other schools. To earn the Associate in Science transfer degree, a student must:

- Earn a minimum of 64 semester credits, of which not more than 16 may be vocational or technical credits used as general electives and which may not be developmental education credits.
- Earn a cumulative grade point average of 2.00 or higher.
- Complete the following general requirements, totaling 40 or more semester credits:

<table>
<thead>
<tr>
<th>English (proof of literacy such as a high school course or any other computer course)</th>
<th>0-3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PLUS ELECTIVES TO TOTAL 64 SEMESTER CREDITS:</strong></td>
<td></td>
</tr>
<tr>
<td>May include up to 16 vocational/technical credits; do not include developmental courses or special needs courses.</td>
<td></td>
</tr>
</tbody>
</table>

The Collegiate Assessment of Academic Proficiency (CAAP) will be used to assess the writing and mathematics skills of all students enrolled in the Associate in Arts curriculum. The assessment will be administered when the earned and currently enrolled credit of the student totals 60 or more semester credits. The student will not be charged the cost of assessment.

### Associate in Science General Education Degree Requirements for Career Programs

An Associate in Science degree with a designated specialty is awarded to a student who successfully completes a career option program. In addition to the course requirements in the specialty area, the following general requirements must be fulfilled:

- Earn a minimum of 68 semester credits, of which not more than 16 credits may be vocational or technical credits used as general electives and which may not be developmental studies credits.
- Earn a cumulative grade point average of 2.00 or higher.
- Complete the requirements of the career option specialty.
- Complete the following 25 semester credits of general education requirements:

<table>
<thead>
<tr>
<th>Communications</th>
<th>(6 semester credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG-105 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SPC-101 Speech Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>(3 credits)</td>
</tr>
<tr>
<td>(Select from AA degree math courses)</td>
<td>3</td>
</tr>
<tr>
<td>Social Science</td>
<td>(6 credits from two areas):</td>
</tr>
<tr>
<td>(Select from AA degree social sciences)</td>
<td>3-3</td>
</tr>
<tr>
<td>Humanities</td>
<td>(3 credits):</td>
</tr>
<tr>
<td>(Select from AA degree humanities courses)</td>
<td>3</td>
</tr>
<tr>
<td>Business</td>
<td>(3 semester credits from business department or a computer course)</td>
</tr>
</tbody>
</table>

### Associate in Applied Science Degree Requirements

The Associate in Applied Science degree is awarded to students who complete two-year technology curricula. Each program has specific course requirements; all programs require a 2.00 or better GPA for graduation. Some arts and science courses may apply to AAS degree requirements in specific programs. Credits earned toward an Associate in Applied Science degree may be transferable to some baccalaureate degree granting institutions, but only at the option of those institutions.

Minimum program requirements total at least 76 semester credits and general requirements include a writing course and an oral communications course or a course combining both; a mathematics course and a related or applied science course; a social science course such as applied psychology or sociology or human relations; a related business or computer applications course.

### Diploma Requirements

Diplomas are issued to students who complete full-time vocational curricula of at least one academic year but less than two years in length. Specific course requirements must be met and a

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### Course Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART-101</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>HIS-110/111</td>
<td>Western Civilization</td>
<td>3</td>
</tr>
<tr>
<td>FL-XXX</td>
<td>(any Foreign Language)</td>
<td>3</td>
</tr>
<tr>
<td>LIT-110/111</td>
<td>American Literature</td>
<td>3</td>
</tr>
<tr>
<td>PHI-101</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHI-105</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>MUS-100</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS-205</td>
<td>Jazz History &amp; Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>REL-101</td>
<td>Survey of World Religions</td>
<td>3</td>
</tr>
<tr>
<td>SDV-103</td>
<td>Successful Learning</td>
<td>1</td>
</tr>
<tr>
<td>SPC-101</td>
<td>Fundamentals of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>DRA-101</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>EDU-235</td>
<td>Children's Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT-101</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>MMS-101</td>
<td>Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>MUS-150/151</td>
<td>World Literature</td>
<td>3</td>
</tr>
<tr>
<td>ART-206</td>
<td>Art History</td>
<td>3</td>
</tr>
<tr>
<td>HIS-285</td>
<td>Classical Heritage</td>
<td>3</td>
</tr>
<tr>
<td>PHI-101</td>
<td>Introduction to Philosophy</td>
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<td>3</td>
</tr>
<tr>
<td>LIT-161</td>
<td>The Short Story</td>
<td>3</td>
</tr>
<tr>
<td>LIT-124</td>
<td>American Poetry</td>
<td>3</td>
</tr>
<tr>
<td>LIT-110/111</td>
<td>American Literature</td>
<td>3</td>
</tr>
<tr>
<td>SOC-186</td>
<td>Contemporary Global Issues</td>
<td>3</td>
</tr>
<tr>
<td>DRA-101</td>
<td>Introduction to Theatre</td>
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<tr>
<td>SOC-186</td>
<td>Contemporary Global Issues</td>
<td>3</td>
</tr>
</tbody>
</table>

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*Use credits for Social Science or Humanities requirements, not for both.
2.00 or better GPA is required.

Minimum requirements total at least 34 semester credits and general requirements include a minimum of one writing course and an oral communications course or a course combining both; an applied mathematics or applied science course; and a human relations course.

Certificate Requirements

Students enrolled in adult vocational or adult general education courses receive certificates signifying satisfactory completion of the program of instruction. Students must attend at least 70 percent of the class sessions and complete the course work according to the instructor’s standards.

Adult High School Diploma Requirements

Diplomas are issued to those students who complete 36 or more high school semester units including the required basic distribution and elective courses. The basic distribution of courses required is as follows:

- 8 semester units of communications (may include speech)
- 4 semester units of mathematics
- 4 semester units of science
- 1 semester unit of government
- 2 semester units of American history
- 3 additional semester units of social studies

Additional elective courses are taken to meet the minimum of 36 semester units. Alternative high schools may have additional local requirements.

Adult high school diplomas are issued to graduates who are at least 18 years of age and whose high school class has graduated. Younger students may be admitted only under exceptional circumstances, must be at least 18 years of age and whose high school class has graduated. Students must be admitted only under exceptional circumstances. Credit may have been previously earned toward requirements and electives by attendance at any accredited high school, approved trade or business school, or college. At least one unit must be completed at Iowa Lakes.

Iowa High School Equivalency Certificate Requirements

The Iowa Department of Education will issue a high school equivalency certificate to a student who earns a standard score of 410 or above on each of the five tests in the GED (General Educational Development) test battery and an average standard score of 450 or above. The student must not be currently enrolled in high school, must be at least 18 years of age and the high school class must have graduated.

Further information, including exceptions, is available from the chief examiner for GED tests at Iowa Lakes, available through the Success Centers. Information on alternative high school programs is available by contacting the executive vice president.

A high school semester unit of credit is awarded based on the student's ability related to achievement. It normally requires about 60 hours of study. (A semester unit equals approximately half a Carnegie unit.) A Continuing Education Unit (CEU), offered in some continuing education courses, is based on “the contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction.” Ten contact hours equal one CEU.

PROCEDURES FOR ACADEMIC CLASSES

Registration

Registration consists of program planning, scheduling of classes through consultation with an advisor, and paying tuition and fees to the college. New students who are enrolling for the first time in the fall are invited to attend an orientation-registration program in the summer. Preregistration is scheduled prior to the beginning of each term. Regular registration dates and the last date to register are published each term. A current permanent mailing address must be on file as part of registration and must be kept up to date. Information sent to the address on file will be considered to be proper notification to the student. Registration for courses may also be completed online.

Change of registration

A “change of registration” form must be completed and submitted to the business office to make any change in registration. Courses may be added during the first two weeks of a session; after the first week, the instructor and director of records and registration must approve. Courses may be dropped at any time prior to the last four weeks of a course in a regular length term. Dates are pro-rated for shorter terms.

Withdrawing from all classes

Please refer to the class schedule booklet for specific dates. It is the student’s responsibility to initiate a formal drop. After the first week of classes, a "W" grade will be assigned for each course. Students who receive financial aid must complete a financial aid exit interview, and may be responsible for repaying financial aid proceeds. (See Refund of Tuition – Federal Financial Aid/Title IV Funds.) The date the institution determines that the student withdrew varies depending on the type of withdrawal. For example, if a student initiates the “official withdrawal” process or provides notification to the institution of their intent to withdraw, the date the institution determines that the student withdrew would be the date the student began the official withdrawal process, or the date the student notified the institution, whichever is first. If a student did not begin the official withdrawal process or provide notification of his or her intent to withdraw, an “unofficial withdrawal” occurs and the institution establishes the withdrawal date as either the midpoint of the semester or the last date of attendance at an academically-related activity.

If a student earns a passing grade in one or more of their classes, an institution is permitted to make the presumption that the student completed the course requirements and may consider the student to have completed the period. If a student fails to earn a passing grade in at least one class the student is enrolled, the withdrawal date is either the midpoint of the semester or the last date of attendance at an academically-related activity. In addition, a student who unofficially withdraws and receives failed grades (Fs) recorded on their academic transcript, may be placed on financial aid probation or extended probation.

Refund of tuition

Refund of Tuition (When there is NO Federal Financial Aid Resources): In the event a student withdraws from a course, the student will receive a refund based on the dates of the courses enrolled. Refunds are calculated on the total tuition paid; fees are not refunded, except for complete withdrawals during the first week. Refunds for courses shorter than a standard term in length, or for courses on non-standard calendars, may be prorated. If a student received Federal Financial Aid, please read the next section. (Please refer to the class schedule book for specific dates.)
College by Cassette/Telecourse, eCollege/online courses, Ed2Go/Gatlin Education and other special course schedules differ; beginning dates and refund dates vary. Fast Track course drops are cancelled with refund only before second class meeting starts. No partial refunds are granted on Fast Tracks. A student who registers but later is unable to attend must notify the college before the last date to cancel the course(s) or program to avoid charges and/or grades. Some exceptions may apply.

Refund of Tuition (Federal Financial Aid/Title IV Funds): Refunds of tuition and fees will be calculated based on the refund policy. The student’s account balance may be affected by the financial aid adjustment that occurs after the Return to Title IV calculation. “Return to Title IV Funds” (Federal Financial Aid) formula dictates the amount of Federal Financial Aid that must be returned to the government by the student. This formula is applicable to any student receiving any type of federal aid other than Federal Work Study if that student withdraws before the 60% completion point of the semester. If funds are released to a student or their account, the student may be required to repay some of the federal grants and loans. Generally the law states (section 485 of the Higher Education Amendments of 1998—P.L./105-244) that the amount of assistance the student has received is determined on a prorated basis, in relationship to the specific term and the amount of the term completed. Students can calculate their liability by logging on to www.r24.com and selecting the “continue” button. Students need to contact the Financial Aid Office for an exit interview and to verify the accuracy of their calculation. (See “Withdrawing from College” for related information.)

Credit assignment in emergency situations
Upon request of the student and after the two-thirds point of a term, the student may be given grades and credit for all courses in progress at the time of a personal emergency such as serious personal or family illness or injury requiring the student to discontinue studies, a death in the immediate family, or other circumstances that preclude a student finishing the term. The instructor of each course and a dean must approve the grade and credit.

Options in credit and grading
A change from credit to audit or audit to credit status may be made during the first two weeks of a term if the permission of the director of records and registration is granted. A change from traditional to pass/no credit (P/Q) grading may also be made during the first two weeks of a term if the instructor and director of records and registration approve. Some restrictions apply; see the section on “grading system.” A shorter option period applies for shorter terms.

Tuition and fees
Students are encouraged to make full payment of tuition and fees by the first day of classes each term. Debit cards, VISA, MasterCard and Discover credit cards are accepted for payment of tuition, fees and bookstore charges. You may also provide information for automatic withdrawals from your checking/savings accounts. For those for whom full payment is not possible, a deferred payment plan is available. textbook charges and aviation flight fees may not be deferred.

If a payment for tuition and fees is not received by the college by the due date, the college may drop the student from all classes with an “administrative drop.” The student may not attend classes until payment of overdue tuition and fees and a $25.00 reinstatement fee are received. No student may register in any new term who has a prior indebtedness to the college, and official transcripts and diplomas will be withheld.

Minnesota reciprocity
A reciprocity agreement exists between Minnesota and Iowa Lakes Community College. Under this agreement persons who qualify as residents of Minnesota for the purpose of higher education may be eligible to attend Iowa Lakes and receive a waiver of non-resident tuition. Conversely, persons who qualify as residents of the Iowa Lakes Community College district, Merged Area III, may be eligible to attend Minnesota West Community College campuses at Worthington, Jackson and Pipestone and receive waiver of non-resident tuition.

TRANSFER OF CREDIT AND OTHER WAYS OF EARNING CREDIT
Iowa Lakes will accept credit from other institutions of higher education and will grant credit for other forms of extra-institutional learning if such credit is determined to be generally equivalent to the credit awarded for work in residence at Iowa Lakes, can be documented in an appropriate manner, and applies to the student’s program of study and toward his or her educational goals.

One of the other methods includes testout, such as the College Level Examination Program (CLEP).

Credit accepted at Iowa Lakes in transfer will not necessarily transfer to another institution in the same manner because most colleges evaluate transfer credit themselves. In addition, credit granted at Iowa Lakes for testout, experiential learning, or other non-traditional forms of instruction may transfer if it qualifies under the policies and procedures for granting such credit at the receiving institution.

Working closely with an advisor and any college or university to which a student wishes to transfer will be important to the planning process. Students are responsible for taking the courses they need to meet their graduation and transfer requirements, but advisors can help smooth the process.

Additional information is available from a counselor’s office, the Success Center, the records office, and from executive deans or advisors.

Inter-institutional transfer of credit
Iowa Lakes will accept credit transferred from other regionally accredited institutions of higher education provided that an official transcript is received directly from the institution, the grades are satisfactory, and that the courses apply toward the student’s field of study. A grade of ‘C’ or better, or its equivalent, is considered to be satisfactory.

Credit from non-regionally accredited institutions may be transferable to Iowa Lakes based on accreditation by a specialized or professional accrediting organization; comparability of the nature, content and level of the credit offered, as determined by Iowa Lakes administration and faculty; and the appropriateness and applicability of the credit earned to the student’s current program of study.

Credit for military service
Credit may be granted for military experience in the following instances:
- two credits in physical education for a year or more of active duty.
- credit for DANTES or USAFI courses with acceptable scores or grades.
- service school courses
- military specialties (MOS, NER, etc.)

A recommendation of the American Council on Education is one of the methods used in determining possible credit for military experience. Applicability to the student’s program of study is also considered.
Credit for extra-institutional and experiential learning

Iowa Lakes may grant credit for formally structured courses offered by non-collegiate sponsors such as businesses, corporations, governmental agencies, unions and professional groups. College credit recommendations published by the National Program on Non-collegiate Sponsored Instruction (through the Regents of the State University of New York) and The National Guide to Educational Credit for Training Programs (through the American Council on Education) are used as guidelines for the awarding of credit.

Credit may be granted to an Iowa Lakes student for learning gained through work experience or personal study, if the student can document that this learning meets the competencies of the course for which credit is requested. Credit may be awarded only for a course listed in the current college catalog.

- The student, upon recommendation of the instructor and advisor, presents a written proposal to an instructor responsible for teaching the course in question, requesting credit for that course. Supporting materials must accompany that request, including a complete description of the prior learning, supervisory verification if available and a description of the competencies achieved.
- If the instructor evaluates the proposal as having merit, the instructor will present the proposal to an Executive Dean or the dean’s designee for permission for the student to contract for the course credit.
- The student and instructor will develop a performance contract to document competency in the course objectives, define a timeline for completion and the student will pay the appropriate charges.
- Instructor verification that the student is to receive credit for the course is submitted to the director of records and registration and a grade of ‘L’ is recorded on the academic record.

Credit by examination

Credit may be earned by examination at Iowa Lakes through the following methods:

- the ACT PEP examinations
- selected DANTES examinations
- "challenge" examinations for specific Iowa Lakes courses which are developed and graded by the appropriate academic department.

Certain requirements must be met and Iowa Lakes specifies acceptable scores for each examination. For further information, contact the testing personnel at one of the Iowa Lakes Success Centers.

- the College Level Examination Program (CLEP) for general and certain subject examinations.

Other information

A minimum of 12 semester credits must be earned in residence before military experience credit or credit by examination will be posted on the permanent record. A maximum of 30 semester credits may be accepted for military experience, experiential learning, and credit by examination. Some forms of earning credit may incur Iowa Lakes fees and charges for test administration, evaluation, and/or posting. Some standardized tests require payment of examination fees as well.

Academic, Financial Aid and Residency Appeals Process

Informal: It is the desire of the college that any difficulties or confusion a student may encounter with the policies or regulations of the college be handled in an informal manner whenever possible. Students are encouraged to talk to their advisors, instructors, or the campus dean to resolve issues as they arise. Questions about financial aid may be asked of the director of financial aid. Questions about academic requirements, policy or procedures may be asked of the registrar, who also handles changes of residency.

Formal: If a student feels that extenuating circumstances might justify the waiver of a particular college policy, application, procedure or regulation as interpreted by a college employee, an appeal may be made to the Academic Review Committee. The Academic Review Committee considers all initial appeals to waive the application of college policies and procedures concerning academic actions, financial aid or residency decisions. (Academic actions include, but are not limited to, academic probation or suspension, procedures, program or degree requirements, or grades allegedly given in error by faculty members.)

Appeal Procedure

A. A student initiates an appeal by making a written statement to the Academic Review Committee, delivered to the registrar. The statement should provide a description of the problem as well as the desired solution, along with any supporting information the student believes will be helpful. The student may request written involvement by faculty members, advisors, or others in support of the case.

B. If the student is dissatisfied with the committee’s decision, a further appeal may then be made in person before the committee. The student may have others appear in support of the petition. If a personal appeal is not requested within thirty (30) days of the previous committee decision, that decision becomes final.

C. If a student has completed both the written and personal appeal processes above, the decision of the committee may be appealed to the campus dean. If the campus dean’s decision is consistent with the Academic Review Committee’s decision, the student may then appeal to the chief academic officer. If the student continues to be dissatisfied, he or she may appeal to the college president or designee, whose decision will be final. Failure to initiate this level of appeal within thirty (30) days of the notification of the committee’s action shall result in the committee’s last decision becoming final.

PRIVACY OF RECORDS

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student’s education records within 45 days of the day the college receives a request for access. A student should submit to the director of records and registration/registrar or other appropriate official a written request that identifies the record(s) the student wishes to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the registrar, the registrar shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student’s education records that the student believes are inaccurate or misleading. A student may ask the college to amend a record that the student believes is inaccurate or misleading. The student should write to the college official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it is inaccurate or misleading. (Note: FERPA was not intended to provide a process to be used to question substantive
Iowa Lakes considers the following to be directory information in 45 days. Further information about the content of the educator items of interest. The college will respond to the request with a request to the director of records and registration listing the item received in their education records. A student must make a written request to withhold any item of directory information. A request to limit directory information must be made to the director of records and registration. The college will not notify the student when notified of the right to a hearing. Any request to limit directory information must be made to the director of records and registration. The college will not notify the student when notified of the right to a hearing. 3. The right to consent to disclosures of personally identifiable information contained in the student education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to college officials with legitimate educational interests. A college official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff, if any); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the college board of trustees, or a student serving on an official committee, such as a discipline or grievance committee, or assisting another college official in performing his or her tasks. A college official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the college discloses education records without consent to another school in which the student seeks or intends to enroll.

Directors information
Iowa Lakes considers the following to be directory information and will release it unless the student requests the college not do so by the end of the second week of classes each term: name, addresses, telephone numbers, e-mail address, date and place of birth, major field of study, classification, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, academic honors awarded, and the most recent previous educational agency or institution attended.

Any request to limit directory information must be made to the director of records and registration. The college will not notify a student of requests for directory information if the student has requested withholding it; Iowa Lakes will not be responsible if disclosure would have been to the student’s benefit. Students not currently enrolled may not restrict directory information. Directory information is released only on an individual basis; lists of students are not available. A request to withhold any item of directory information will normally result in the college withholding all information.

Students’ right to review
Students have the right to inspect and review information contained in their education records. A student must make a written request to the director of records and registration listing the item or items of interest. The college will respond to the request within 45 days. Further information about the content of the educational record and the right to challenge portions which the student feels are incorrect is available in the records and registration offices at Emmetsburg or Estherville.

Requests for transcripts
A transcript of credit courses taken at Iowa Lakes Community College is issued to a third party only upon written request by the student. Forms for this purpose are available at all campuses as well as the college web site: www.iowalakes.edu. A signed letter is also acceptable and may be sent by mail or facsimile (FAX). Transcripts are normally sent out within a few days of the request; at the end of a term it takes longer to post grades and degrees on records. All transcripts are processed at the Emmetsburg campus. Iowa Lakes Records, 3200 College Drive, Emmetsburg, IA 50536, 712-852-5211 or FAX 712-852-2152.

There is no charge for transcripts sent by regular mail service. Same day, FAX, and similar special services incur charges. Contact the records office for the special service fees. Transcripts are not released if the student has an overdue financial obligation to the college.

TRANSFER TO OTHER INSTITUTIONS
Students who plan to transfer to another institution after the completion of their study at Iowa Lakes should plan early to meet the requirements of the institution to which they plan to transfer. Iowa Lakes advisors and counselors will help students meet their educational goals. Students are also urged to work closely with the school to which they will transfer to be sure that courses will transfer and that requirements will be met.

Students who plan to transfer to a four-year college should be aware that many schools have increased the level of mathematics competency required for graduation to the level of college algebra or higher. This requirement also applies to community college graduates with the A.A. degree, even though the A.A. degree may meet the four-year college general requirements. Some colleges are now requiring a foreign language and some require that science courses also include laboratory work. Students who take college level work as high school students who use the credit for high school graduation requirements should be aware that some colleges will not also allow that credit to count toward a college degree.

Credit granted at Iowa Lakes for testout, experiential learning, or other non-traditional forms of instruction may transfer if it qualifies under the policies at the receiving institution. An official transcript of Iowa Lakes work should be sent to the transfer institution when the school asks for it.

CONTINUING EDUCATION
Iowa Lakes Community College is aware that education is a lifelong activity and provides preparatory, upgrading and enriching continuing education courses for those residents who want, need and can benefit from such training. A comprehensive schedule which provides area residents with the opportunity to participate in programs and activities meet their needs. Working directly with communities and area businesses, the division provides short courses, programs, and seminars in a timely manner.

Adult Basic Education
This program provides adults with a ‘second chance’ to learn and/or brush up on basic skills such as reading, writing, computation, and balancing a checking account. Classes are offered at various locations throughout the areas served by the college.

Vocational Supplemental Courses
Courses in this category are designed to increase the skills and understandings needed by adult workers who are already employed but want to upgrade or update their occupational competencies. The target population for these courses is the working adult.
Needs are identified by several methods. Individuals or groups may request a specific course which they need. Agencies, organizations, businesses and industries may make requests. Advisory committees also propose courses and programs, such as those for nursing or building maintenance supervisors. Licensing boards also assist in identifying needs.

COMMUNITY SERVICE AND SERVICE LEARNING
A community service program is designed to promote cultural, business, industrial, recreational, cultural and social development. This includes providing leadership in solving community problems, serving new constituents, and making college facilities available.

Service learning at Iowa Lakes is a method of teaching and learning which engages students in solving problems and addressing local needs within the college or the community as part of their comprehensive educational program. Service learning combines academic curriculum with service in a college or community service project.

Iowa Lakes Community College is also involved in community service projects such as the Retired and Senior Volunteer Program (RSVP), the Small Business Development Center and health related programs.

ENGLISH AS A SECOND LANGUAGE
Designed to teach English to those people for whom it is not the primary language, this program has assisted migrant and refugee peoples who have moved into the area. Emphasis is on English for daily living and on-the-job language requirements.

EXTENDED LEARNING

Public Television Courses
Each semester the college offers a variety of video-based courses from Public Television. The courses are available on video cassettes or through Iowa Public Television broadcasts. Students register for the courses at Iowa Lakes, watch the video programs at home and complete assigned work. Iowa Lakes provides a qualified instructor to facilitate completion of the course by the student, communicating by mail, in local conferences, by telephone, and by e-mail. Students typically are required to meet at a campus facility at least twice during the term, although some courses may require additional meetings. Testing is available at Iowa Lakes Success Centers.

University of Iowa RN-BSN Satellite Program
The University of Iowa College of Nursing offers an opportunity for registered nurses to complete the Bachelor of Science in Nursing (BSN) degree through a distance education program available primarily online. To apply for admission to the UI College of Nursing, a student must be licensed as a registered nurse and must have completed at least four of the number of prerequisite courses with a minimum GPA of 2.50.

Prerequisite and general education courses are offered at Iowa Lakes through a variety of methods including videotape presentations, teleconference, guided correspondence study, and regular classroom and clinical instruction. Nursing major courses are offered primarily online through the University of Iowa. A nursing faculty member from UI is on site at Iowa Lakes and is responsible for facilitating courses and providing guidance and advisement to enrolled and prospective students. Interested students may request a no-charge evaluation of their previous school transcripts and receive a curriculum pattern and suggested plan of study based on their individual needs. Students who are currently in an Associate Degree Nursing program are encouraged to seek advisement early if they are interested in applying for this program. The UI Faculty Facilitator can be contacted through Iowa Lakes in Emmetsburg.

Postsecondary Enrollment Options Act
Iowa Lakes Community College welcomes and encourages qualified high school students to enroll in college-level classes and looks forward to serving their needs. To facilitate the Postsecondary Enrollment Options Act, Iowa Lakes has established the following guidelines.

Students must complete and submit the following information before the semester in which they plan to enroll:

a. An official high school transcript
b. ASSET, COMPASS or ACT score
c. A signed Iowa Lakes High School registration form (available from high school counselor)

All high school registration forms require a high school administrator, parent and student signature or registration is considered incomplete. A new registration form must be completed for each semester.

Each student must take an ASSET, COMPASS or ACT test to enroll in an Iowa Lakes course. There is a minimum score that must be reached on the test in order to enroll in any writing or math course.

Students receiving low scores are encouraged to return to their local high school to upgrade their skills. If no means are available at the high school level to improve those skills, the student may enroll in an Iowa Lakes developmental class, but not regular college classes, until the required developmental courses have been completed satisfactorily.

Under the Postsecondary Enrollment Options Act, the local school district assumes responsibility for tuition, textbooks, materials, and fees. The law further requires the student or parent to reimburse the local district if he/she fails to complete the course or receive adequate credit.

The student is responsible for withdrawing officially if enrollment ceases during the term for any reason. Withdrawal and refund policies and procedures are detailed elsewhere in this catalog.

All information regarding PSEO classes is available through the high school guidance counselor.

Third Age College
The Third Age College is an educational organization that provides an academic setting to enrich the lives of individuals over the age of 55 and interested others. The term “third age” is borrowed from the French and indicates productivity during retirement rather than this “age” becoming the mere closure of life.

Classes meet in Algona, Emmetsburg, Estherville, Spencer and Spirit Lake and focus on academics rather than leisure and pleasure. A variety of topics and subject areas are covered in courses.
College Transfer & Career Option Programs

COLLEGE TRANSFER
A student completing an Associate in Arts or Associate in Science Transfer degree will complete 39-44 credits of required subjects and 20-25 credits of electives. These requirements meet some or all of the general education requirements at many four-year colleges. Courses can be selected in major areas to meet pre-professional requirements.

CAREER OPTION PROGRAMS
A number of career option programs are offered by the college. These unique programs allow the student the option of transferring to a four-year institution or going directly into employment. A student who completes the two-year program receives the Associate in Science degree. With the assistance of advisory committees, these programs are designed to ensure that students are adequately prepared to meet practical employment needs. The curriculum is composed of general education courses, specialty courses and related on-the-job training. Programs are available in the following areas.

Accounting Specialist
Administrative Assistant
Aviation/Airport Management
Broadcast Media Specialist
Business Administration and Management
Casino Management
Computer Aided Drafting and Design
Computer Programming
Criminal Justice
Early Childhood Education
Environmental Studies
Graphic Design and Technology
Health Care Administration
Human Services/Disability Studies
Information Technology
Journalism and Photography
Paralegal/Legal Studies
Recreation & Leisure Management
Sales and Marketing Management
Substance Abuse Counseling
Sustainable Energy Resource Management
Web Development & Design

ENG-106 Composition II .................................................3
ACC-929 Individual Projects ........................................3
ACC-231 Intermediate Accounting I ..............................4
ACC-221 Cost Accounting.............................................3
ECN-120 Principles of Macroeconomics ........................3
BUS-211 Business Statistics ...........................................4
ACC-232 Intermediate Accounting II ..............................4
ECN-130 Principles of Microeconomics .......................3
BUS-115 Business Correspondence ...............................2
MGT-101 Principles of Microeconomics ....................... OR
BUS-102 Introduction to Business ...............................3

Total Credits ....................................................................70

Administrative Assistant
Associate in Science
Location: Emmetsburg

Program requirements:
ACC-111 Intro to Accounting (3cr.) .......................... OR
ACC-131 Principles of Accounting I ..............................4
ADM-254 Business Professionalism ..............................1
ADM-255 Business Professionalism II .........................1
ADM-132 Business Math & Calculators ........................2
ADM-116 Keyboarding II .............................................3
ADM-162 Office Procedures .........................................3
BCA-134 Word Processing ..........................................3
ADM-354 Business Professionalism III .........................1
ADM-355 Business Professionalism IV ........................1
ADM-941 Practicum ....................................................5
CSC-110 Introduction to Computers ...........................3
( can count as general requirement)

Business electives: (select 9 cr. from the following or other business electives approved by advisor)
ACC-161 Payroll Accounting .....................................3
ACC-310 Computer Accounting ..................................2
BCA-185 Beginning Web Page Dev ............................3
BCA-217 Advanced Microsoft Office Apps ......................3
ECN-120 Principles of Macroeconomics ....................3
BUS-183 Business Law .................................................3
MGT-101 Principles of Microeconomics ....................3
NET-140 Networking Essentials .................................4

Remaining AS general requirements and electives
Total Credits .............................................................68
## Aviation/Airport Management
**Associate in Science**  
*Location: Estherville Campus*

### Program requirements:
- AVI-180 Private Pilot Flight Lab I  ........................................... 3
- AVI-140 Private Pilot Ground School ........................................ 4
- AVI-245 Commercial/Instr Cross Country .................................. 3
- AVI-261 Commercial Pilot Ground School .................................. 3
- AVI-246 Commercial/Instrument Flight Lab ................................ 3
- AVI-212 Instrument Ground School ........................................... 4
- AVI-300 Flight Instructor Ground School .................................. 3

**Take one of the following:**
- AVI-350 Flight Instructor Flight Lab .......................................... OR
- AVI-405 Multi-Engine Rating .................................................... 3
- AVI-941 Practicum ................................................................. 1-5
- AVI-301 Instrument Instructor .................................................. 1-5

Remaining AS general requirements and electives  
Total Credits ........................................................................... 68

## Broadcast Media Specialist
**Associate in Science**  
*Location: Estherville Campus*

### Program requirements:
- MMS-101 Mass Media ................................................................. 3
- MMS-241 Public Relations and Marketing ................................... 3
- MMS-298 Portfolio Preparation ................................................... 0
- MMS-105 Audio Production ....................................................... 3
- MMS-941 Practicum ................................................................. 2/5
- MMS-115 TV Studio Production ................................................... 3
- MMS-130 Video Field Production .............................................. 3
- MMS-211 Advanced Video Editing ............................................. 3
- MKT-140 Principles of Selling ................................................... OR
- MKT-150 Principles of Advertising ............................................. 3
- JOU-121 Newswriting & Reporting .......................................... 3
- JOU-210 Media Law and Ethics ................................................ 3
- MMS-234 Radio Workshop .......................................................... 4
- MMS-225 Advanced Television Production ................................ 3
- MMS-230 Electronic Video Production ....................................... 3

Remaining AS general requirements and electives  
Total credits ............................................................................. 68

## Business Administration & Management
**Associate in Science**  
*Location: All Sites*

### Program requirements:

#### Business core requirements:
- ACC-131 Principles of Accounting I ......................................... 4
- ACC-132 Principles of Accounting II ......................................... 4
- CSC-110 Introduction to Computers .......................................... 3
- ECN-120 Principles of Macroeconomics .................................... 3
- ECN-130 Principles of Microeconomics ..................................... 3
- BUS-102 intro to Business ....................................................... 3
- BCA-217 Advanced Microsoft Office Appl .................................. 3
- BUS-932 Business Practicum (5 cr.) ........................................ 5
- ENG-106 Composition II & 1 approved elective .......................... OR
- BUS-932 Business Practicum (3 cr.) & 1 approved elective ....... 5
- MKT-110 Principles of Marketing ............................................. 3
- BUS-183 Business Law ............................................................. 3
- MGT-101 Principles of Management ......................................... 3
- BUS-115 Business Correspondence ........................................... 2

Remaining AS general requirements and electives  
Concentration Courses (see list below) ...................................... 12
Choose 4 concentration courses from the tracks below for a total of 12 credits.

### Small Business Management
- MKT-140 Principles of Selling ................................................ 3
- MGT-110 Small Business Management ....................................... 3
- MKT-150 Principles of Advertising ......................................... 3
- BUS-250 Principles of Real Estate ........................................... 3
- MGT-170 Human Resource Management .................................. 3

### Leadership Management
- MKT-130 Principles of Supervision .......................................... 3
- BUS-197 Leadership Development ........................................... 3
- MGT-165 Principles of Quality ................................................ 3
- BUS-200 Time, Stress & Change Mgt. ....................................... 3

### Banking and Finance
- FIN-101 Principles of Banking ................................................ 3
- FIN-180 intro to Investments ................................................... 3
- FIN-140 Business Finance ....................................................... 3
- BUS-250 Principles of Real Estate ........................................... 3
- BUS-268 Life Insurance & Financial Planning .......................... 3

### Human Resources
- BUS-161 Human Relations ..................................................... 3
- MGT-190 Employee Comp and Benefits .................................. 3
- MGT-170 Human Resource Management .................................. 3
- MGT-178 Employment Law ...................................................... 3

Total credits ............................................................................... 71

## Casino Management
**Associate in Science**  
*Location: Emmetsburg Campus*

### Program requirements:
- CAS-113 Introduction to Gaming ............................................. 3
- PENDING Employee Compensation & Benefits .......................... 3
- HCM-591 Housekeeping Management ..................................... OR
- HCM-319 Intro to Hospitality Field ......................................... 3
- ACC-131 Principles of Accounting I ........................................ 4
- CSC-110 Introduction to Computers ........................................ 3
- CAS-120 Casino Management & Marketing ............................ 3
- HCM-310 Hospitality Law ....................................................... OR
- HCM-313 Hospitality Law PENDING ....................................... 3
- CAS-133 Casino Surveillance & Security .................................. 3
- MGT-170 Human Resources Management ............................... 3

Remaining AS general requirements and electives  
Total Credits ............................................................................... 69

## Computer Aided Drafting & Design
**Associate in Science**  
*Location: Estherville Campus*

### Program requirements:
- MAT-127 College Algebra and Trig. .......................................... 5
- CSC-110 Intro to Computers .................................................... 3
- CAD-119 Computer Aided Drafting I ........................................ 3
- CAD-224 Descriptive Geometry .............................................. 3
- CAD-121 Computer Aided Drafting II ....................................... 3
- CAD-901 CAD Practicum .......................................................... 5
- CAD-140 Parametric Solid Modeling I ..................................... 3
- CAD-230 Geometric Dimen/Tolerance ...................................... 2
PHY-162 College Physics I ..............................................4
PHY-172 College Physics II .............................................4
CAD-136 Technical Design .............................................3
CAD-141 Parametric Solid Modeling II ............................3
WTI-126 Basic Hydraulics ..............................................3
CIS-141 Computer Science ............................................3
Remaining AS general requirements and electives
Total credits .................................................................68

Computer Programming
Associate in Science
Location: Emmetsburg Campus

Program requirements:
CSC-110 Intro to Computers ...........................................3
(can count as general requirement)
NET-140 Network Essentials .........................................4
CIS-141 Computer Science ............................................3
CIS-125 Intro to Prog. Logic w/Language .............................3
CIS-161 C++ .................................................................3
CIS-332 Database and SQL ............................................3
CIS-612 Advanced Virtual Basic ......................................3
NET-122 Computer Hardware Basics ................................3
CIS-171 JAVA ...............................................................3
CIS-941 Computer Science Practicum ..............................5
MAT-157 Statistics ........................................................4
MAT-140 Finite Math .....................................................3
(can count as general requirement)
Remaining AS general requirements and electives
Total credits .................................................................68

Early Childhood Education
Associate in Science
Location: Emmetsburg Campus

To advance in the course program sequence or to graduate
a student may have no grade lower than 'C' in any Early
Childhood Education (ECE) course or in course EDU-235.

Program requirements:
ECE-170 Child Growth & Development ............................3
ECE-110 Child Care Professionals I ................................1
ECE-112 Portfolio Development I ....................................1
ECE-133 Child Health, Safety & Nutrition ..........................3
ECE-103 Intro to Early Childhood Education ......................3
ECE-111 Child Care Professionals II ................................1
ECE-158 Early Childhood Curriculum I .............................3
ECE-159 Early Childhood Curriculum II ............................3
ECE-290 Early Childhood Program Admin. ..........................3
ECE-262 Early Childhood Field Experience .......................3
ECE-243 Early Childhood Guidance ..................................3
ECE-140 Early Childhood Curric. Planning ........................3
EDU-235 Children’s Literature ........................................3
(can count as general requirement)
ECE-210 Early Childhood Professionals I ........................1
PENDING - Spanish for Professionals:Education .................2
ECE-261 Contemporary Issues in Child Care ......................3
ECE-221 Infant/Toddler Care and Education ....................3
ECE-211 Early Childhood Professionals II ........................1
ECE-113 Portfolio Development II ...................................1
ECE-278 Early Childhood Field Experience II ....................3
CSC-110 Introduction to Computers ................................3
(can count as general requirement)
Remaining AS general requirements and electives
Total credits .................................................................68

Environmental Studies
Associate in Science
Location: Estherville Campus

Program requirements:
EVS-114 Environmental Studies I .....................................4
EVS-124 Environmental Studies II ...................................4
EVS-203 Environmental Seminar I ....................................1
EVS-204 Environmental Seminar II ...................................1
Take one of the following groups of two courses:
EVS-234 Env. Technology Techniques .................................4
EVS-941 Practicum ........................................................4
Select 12 science credits in addition to 4 credits of general
requirement .................................................................12
Remaining AS general credits in addition to 4 credits of general
requirement .................................................................12
Total credits .................................................................68

Graphic Design and Technology
Associate in Science
Location: Estherville Campus

Program requirements:
ENG-106 Composition II ...............................................3
JOU-171 Introduction to Photography ..................................OR
JOU-173 Digital Photography ...........................................3
ART-101 Art Appreciation .............................................3
(satisfies humanities requirement)
GRA-234 Dreamweaver Level I .........................................3
GRA-118 Electronic Publishing .......................................3
(satisfies computer/business requirement)
ART-127 Digital Illustration ...........................................3
ART-133 Drawing ..........................................................3
GRA-175 Graphic Design .................................................3
GRA-188 Advertising Layout & Composition .....................3
GRA-140 Digital Imaging ................................................3
GRA-121 Digital Drawing ...............................................3
GRA-228 Flash ..............................................................3
ART-121 2-D Design ....................................................4
GRA-162 Web Page Graphics .........................................3
GRA-932 Internship .......................................................4
Remaining AS general requirements and electives
Total Credits .............................................................69
Health Care Administration
Associate in Science
Location: Spencer Campus (Weekend College)

Program requirements:
CSC-110 Introduction to Computers ..................................................3
(can count as general requirement)
HCA-130 Communication with the Elderly ........................................3
PSY-111 Introduction to Psychology ..................................................3
(can count as general requirement)
HCA-280 Health Care Admin. Practicum I .........................................2
ACC-131 Principles of Accounting ....................................................4
SOC-115 Social Problems ................................................................3
(can count as general requirement)
HCA-110 Health Care Administration I .............................................3
HCA-281 Health Care Admin. Practicum II ........................................3
HCA-111 Health Care Administration II ............................................3
HCA-135 Gerontology ....................................................................3
HCA-282 Health Care Admin. Practicum III .......................................2
HCA-112 Health Care Administration III .........................................3
HCA-125 Health Care Accounting .....................................................1
HCA-283 Health Care Admin. Practicum IV .......................................2
HCA-284 Health Care Admin. Practicum V .......................................2
HSC-223 Human Relations ..............................................................2
HCA-120 Legal & Political Aspects of HCA .......................................3
HCA-285 Health Care Admin. Practicum VI ......................................1
MGT-101 Principles of Management ................................................3
BIO-163 Essentials of Anatomy & Physiology ................................4
(can count as general requirement)
ENG-106 Composition II .................................................................2
Remaining AS general requirements and electives ......................................69

Human Services and Disability Studies
Associate in Science
Location: Estherville Campus

Program requirements:
PSY-111 Introduction to Psychology ..................................................3
(can count as general requirement)
DSV-135 Assessment and Instruction .................................................3
DSV-125 Behavior Management .......................................................3
DSV-155 Services & Vocational Planning .........................................4
HSV-225 Counseling Skills ...............................................................3
Complete a total of 6 credits from the following:
DSV-941 Practicum in HS/DS ...........................................................3,4,6
DSV-932 Internship HS/DS ...............................................................2,3
HSC-114 Medical Terminology .........................................................3
Choose 3 of the courses listed below:
PSY-121 Developmental Psychology ..............................................3
PSY-241 Abnormal Psychology .........................................................3
HSV-162 Intro to Disabilities & Services ...........................................3
PSY-211 Psychology of Adjustment ..................................................3
Any Social Science Elective ...............................................................3
Remaining AS general requirements and electives ......................................68

Information Technology
Associate in Science
Location: Emmetsburg Campus

Program requirements:
NET-122 Computer Hardware Basics ..............................................4
NET-140 Networking Essentials .......................................................4
NET-314 Windows Server ..............................................................4
NET-304 Windows Workstation Oper. Syst. .........................................4
NET-340 Win 2000 Active Directory ...............................................4
NET-331 Windows 2000 Networking Infra .......................................4
BCA-185 Beginning Web Page Development ....................................3
CIS-141 Computer Science .............................................................3
CIS-332 Data Base and SQL ............................................................3
NET-910 Co-op Work Experience ..................................................3
NET-364 Windows Directory Services Dsgn ....................................4
NET-330 Windows 2003 Networking ..............................................4
NET-653 Microsoft Exchange Server .............................................4
Remaining AS general requirements and electives ......................................69

Journalism and Photography
Associate in Science
Location: Estherville Campus

Program requirements:
JOU-220 Advanced Newswriting .....................................................3
JOU-176 News & Forensic Photography ...........................................3
ART-286 Photography: Portraiture ...............................................3
MMS-101 Mass Media ..................................................................3
GRA-118 Electronic Publishing .......................................................3
ART-127 Digital Illustration ............................................................OR
GRA-140 Digital Imaging .................................................................3
JOU-171 Introduction to Photography ...............................................3
JOU-121 Newswriting and Reporting .............................................3
JOU-941 Practicum ........................................................................2/5
McT-140 Principles of Selling ..........................................................OR
McT-110 Principles of Marketing ....................................................3
JOU-140 Newspaper Lab I ...............................................................2
JOU-141 Newspaper Lab II .............................................................2
JOU-240 Newspaper Lab III ...........................................................2
JOU-241 Newspaper Lab IV ...........................................................2
JOU-210 Media Law and Ethics .......................................................3
JOU-173 Digital Photography .........................................................3
ENG-106 Composition II .................................................................3
Remaining AS general requirements and electives ......................................68

Paralegal/Legal Studies
Associate in Science
Location: Estherville Campus

Program requirements:
ENG-106 Composition II .................................................................3
LGL-205 Employment Law .............................................................3
LGL-111 Introduction to Law and Paralegal ........................................3
LGL-250 Family Law .................................................................3
LGL-151 Legal Research & Writing I ...............................................4
CRJ-131 Criminal Law and Procedure ............................................3
LGL-180 Torts and Litigation ..........................................................3
LGL-140 Wills, Trusts and Estate Admin ..........................................3
LGL-152 Legal Research & Writing II ..............................................4
LGL-240 Civil Procedure and Practice .............................................4
LGL-941 Legal Assistant Practicum .................................................4/6
Complete at least two of the following four courses:
ACC-261 Income Tax Accounting .................................................3
BUS-250 Principles of Real Estate ..................................................3
LGL-200 American Trial Process ....................................................3
BUS-183 Business Law .................................................................3
Remaining AS general requirements and electives ......................................68
### Recreation & Leisure Management

**Associate in Science**  
**Location:** Estherville Campus

**Program requirements:**
- REC-114 Foundations of Recreation ................................................................. 4
- REC-118 Recreation Leadership ........................................................................... 4
- REC-122 Recreation Fieldwork I .......................................................................... 2
- PEH-102 Health .................................................................................................... 3
- PEH-142 First Aid .................................................................................................. 2
- REC-214 Prog. Planning and Organization ......................................................... 4
- PEC-160 Sports Officiating ..................................................................................... 2
- REC-113 Concepts of Wellness ............................................................................. 3
- REC-233 Intro to Outdoor Recreation .................................................................... 3
- REC-236 Recreation Practicum (Scr.) .................................................................... 6
- REC-235 Recreation Practicum .............................................................................. 6
- REC-133 Outdoor Living Skills .............................................................................. 3
- REC-140 Kayaking ................................................................................................ 1
- REC-132 Orienteering ............................................................................................ 2
- REC-112 Backpacking ........................................................................................... 1
- Choose 4 courses from subject area PEA ............................................................. 4
- Remaining AS general requirements and electives
- Total Credits ........................................................................................................ 68

### Sustainable Energy Resource Management

**Associate in Science**  
**Location:** Estherville

**Program requirements:**
- SER-101 Intro to Sustainable Energy Resources ................................................. 3
- EVS-203 Environmental Seminar I ....................................................................... 3
- BUS-102 Introduction to Business ......................................................................... 3
- CSC-110 Intro to Computers ................................................................................. 3
- PSY-111 Intro to Psychology .................................................................................. 3
- EVS-114 Environmental Studies I ......................................................................... 4
- EVS-214 Environmental Studies II ........................................................................ 4
- SER-111 Intro to Wind Energy Resources ............................................................. 3
- EVS-204 Environmental Seminar II ..................................................................... 3
- MKT-140 Principles of Selling ............................................................................... 3
- EVS-941 Environmental Practicum ....................................................................... 3
- SER-121 Intro to Biomass Energy Resources ....................................................... 3
- ACC-131 Principles of Accounting I ..................................................................... 4
- MKT-110 Principles of Marketing ......................................................................... 3
- ECN-120 Macroeconomics ................................................................................. 3
- SER-201 Sustainable Energy Resources Mgt ......................................................... 3
- ACC-132 Principles of Accounting II .................................................................... 4
- ECN-130 Microeconomics ..................................................................................... 3
- MGT-101 Principles of Management ................................................................... 3
- PHI-105 Introduction to Ethics ............................................................................. 3
- Remaining AS general requirements and electives
- Total Credits ........................................................................................................ 70

### Sales and Marketing Management

**Associate in Science**  
**Location:** Emmetsburg Campus

**Program requirements:**
- BUS-161 Human Relations .................................................................................. 3
- ACC-111 Intro to Accounting .............................................................................. 3
- BUS-175 Business Seminar I ............................................................................... 1
- MKT-142 Consumer Behavior .............................................................................. 3
- MKT-155 Visual Merchandising ............................................................................ 4
- MKT-938 On-the-Job Training .............................................................................. 2
- MKT-140 Principles of Selling .............................................................................. 3
- MGT-101 Principles of Management ................................................................... 3
- BUS-932 Practicum .............................................................................................. 5
- MKT-110 Principles of Marketing ........................................................................ 3
- MKT-150 Principles of Advertising ..................................................................... 3
- PENDING Retail Buying & Merchandising ............................................................. 4
- MKT-290 Professionalism: DEX/DECA* ................................................................. 0-1
- MKT-291 Professionalism II: DEX/DECA* ............................................................. 0-1
- MKT-292 Professionalism III: DEX/DECA* ............................................................. 0-1
- MKT-293 Professionalism IV: DEX/DECA* ............................................................. 0-1
- *Take at least 2 DECA Activities for credit
- Remaining AS general requirements and electives
- Total Credits ........................................................................................................ 70

### Substance Abuse Counseling

**Associate in Science**  
**Location:** Estherville

**Program requirements:**
- DSV-135 Assessment & Instruction ..................................................................... 3
- PSY-111 Introduction to Psychology .................................................................... 3
- (can count as general requirement)
- DSV-160 Counseling Skills (4cr.) ....................................................................... OR
- HSV-225 Counseling Skills .................................................................................. 3
- CRJ-207 Drug Use & Abuse .................................................................................. 3
- PSY-121 Developmental Psychology .................................................................... 3
- PHI-105 Introduction to Ethics ............................................................................ 3
- SOC-200 Minority Group Relations ...................................................................... 3
- PSY-241 Abnormal Psychology ........................................................................... 3
- HSV-901 Substance Abuse Practicum I PENDING ............................................. 3
- HSV-902 Substance Abuse Practicum II PENDING ........................................... 4
- Remaining AS general requirements and electives
- Total Credits ........................................................................................................ 68

### Web Development & Design

**Associate in Science**  
**Location:** Estherville Campus

**Program requirements:**
- GRA-158 Web Animation ..................................................................................... 3
- GRA-121 Digital Drawing ..................................................................................... 3
- MKT-150 Principles of Advertising ..................................................................... 3
- CSC-110 Intro to Computers ................................................................................. 3
- GRA-140 Digital Imaging ...................................................................................... 3
- MKT-110 Principles of Marketing ........................................................................ 3
- GRA-234 Dreamweaver Level I ........................................................................... 3
- GRA-932 Web Development Internship ............................................................... 3
- GRA-235 Dreamweaver Level II ......................................................................... 3
- GRA-162 Web Page Graphics .............................................................................. 3
- JOU-173 Digital Photography .............................................................................. 3
- GRA-236 Dreamweaver Level III ........................................................................ 3
- GRA-228 Flash ...................................................................................................... 3
- GRA-166 Web Animations .................................................................................... 3
- Remaining AS general requirements and electives
- Total Credits ........................................................................................................ 68
Two-year technical programs are designed to prepare students for successful job entry. The Associate in Applied Science degree is awarded on completion. Some courses may be transferable to other colleges.

Programs are available in the following areas:
- Agribusiness Technology
- Agriculture Production Technology
- Associate Degree Nursing
- Auto Collision and Paint Technology
- Automotive Technology
- Biorenewable Fuels Technology
- Construction Technology
- Farm Equipment and Diesel Technology
- Hotel and Restaurant Management
- Landscape & Turfgrass Technology
- Marine Service Technology
- Medical Assistant
- Medical Office Technology
- Motorcycle and Small Engine Technology
- Paramedic Specialist
- Surgical Technology
- Wind Energy and Turbine Technology

**Technical Programs**

**Agribusiness Technology**

**Associate in Applied Science**

**Location: Emmetsburg Campus**

**Required Courses Credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>AGB-339</td>
<td>Intro to Ad Layout</td>
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<tr>
<td>AGC-106</td>
<td>Intro to Computers</td>
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<td>AGB-194</td>
<td>Beginning Sales</td>
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<td>AGB-343</td>
<td>Office Procedure</td>
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<td>AGB-437</td>
<td>Commodity Marketing</td>
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<td>AGC-316</td>
<td>Field Studies-Agribusiness</td>
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<td>AGC-340</td>
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<td>AGB-307</td>
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<td>AGB-210</td>
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<td>AGP-242</td>
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<td>AGA-283</td>
<td>Pesticide App Certification</td>
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<td>AGB-284</td>
<td>Ag Chemicals II</td>
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<td>AGB-352</td>
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<td>AGA-131</td>
<td>Plant Physiology</td>
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<td>AGA-374</td>
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<td>AGA-113</td>
<td>Advanced Agronomy</td>
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<td>AGA-353</td>
<td>Advanced Soil Fertility</td>
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<td>WEL-337</td>
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<td>AGC-111</td>
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<td>AGM-102</td>
<td>Equipment Maintenance</td>
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<td>AGB-850</td>
<td>Employ Exp I – Agribusiness</td>
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<td>Employ Exp II – Agribusiness</td>
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<td>AGC-104</td>
<td>Applied Computers in Ag</td>
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<td>AGS-114</td>
<td>Survey of the Animal Industry</td>
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<td>AGS-317</td>
<td>Animal Nutrition</td>
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<td>AGS-117</td>
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<td>AGB-436</td>
<td>Grain Merchandising</td>
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<td>AGB-930</td>
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<td>AGB-101</td>
<td>Ag Economics &amp; Management</td>
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</table>

**Agriculture Production Technology**

**Associate in Applied Science**

**Location: Emmetsburg Campus**

**Required Courses Credits**

<table>
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<th>Course Title</th>
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<td>AGB-437</td>
<td>Commodity Marketing</td>
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<tr>
<td>AGB-110</td>
<td>Human Relations I</td>
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<td>AGB-954</td>
<td>Employ Exp I – Ag Prod</td>
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<td>AGB-102</td>
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<td>COM-740</td>
<td>Oral Communications</td>
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<td>AGB-283</td>
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<td>AGS-317</td>
<td>Animal Nutrition</td>
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<td>AGC-111</td>
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<td>Introduction to Soils</td>
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<td>AGS-317</td>
<td>Employment Experience IV – Ag Prod</td>
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**Concentration Courses**

(select 18 credits from the following):

**Crop Production**

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<td>Grain Harvest, Hdlg, Drying</td>
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</tr>
<tr>
<td>AGA-375</td>
<td>Integrated Crop Management</td>
<td>2</td>
</tr>
<tr>
<td>AGA-160</td>
<td>Agronomy-Nutrient Mgt</td>
<td>2</td>
</tr>
<tr>
<td>AGB-329</td>
<td>Introduction to GPS</td>
<td>3</td>
</tr>
<tr>
<td>AGA-219</td>
<td>Planting and Seeding Seminar &amp; Lab</td>
<td>1</td>
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**Swine Production**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>AGS-400</td>
<td>Swine Production I</td>
<td>2</td>
</tr>
<tr>
<td>AGS-522</td>
<td>Swine Grower/Finisher Mgt</td>
<td>2</td>
</tr>
<tr>
<td>AGS-529</td>
<td>Swine Reproduction &amp; Mgt</td>
<td>2</td>
</tr>
<tr>
<td>AGS-510</td>
<td>Swine Confinement Systems</td>
<td>2</td>
</tr>
<tr>
<td>AGS-511</td>
<td>Adv Swine Confinement Mgt</td>
<td>2</td>
</tr>
<tr>
<td>AGS-520</td>
<td>Swine Records &amp; Analysis</td>
<td>3</td>
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</table>

**Beef Production**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGS-556</td>
<td>Intro to Beef Cow Production</td>
<td>2</td>
</tr>
<tr>
<td>AGS-557</td>
<td>Advanced Beef Cow Production</td>
<td>2</td>
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<tr>
<td>AGS-558</td>
<td>Grazing Systems &amp; Forage Mgt</td>
<td>2</td>
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<tr>
<td>AGS-559</td>
<td>Beef Feedlot Production</td>
<td>2</td>
</tr>
<tr>
<td>AGS-561</td>
<td>Advanced Beef Production</td>
<td>2</td>
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</table>

**General**

<table>
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<tbody>
<tr>
<td>AGB-438</td>
<td>Ag Futures &amp; Future Options</td>
<td>2</td>
</tr>
<tr>
<td>AGS-240</td>
<td>Animal Health</td>
<td>2</td>
</tr>
<tr>
<td>AGS-309</td>
<td>Farm Machinery Management</td>
<td>2</td>
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</tbody>
</table>

**Enterprise Labs - take 4 courses from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AGS-350</td>
<td>Artificial Insemination of Cattle</td>
<td>1</td>
</tr>
<tr>
<td>AGS-562</td>
<td>Farm Enterprise Beef Feedlot</td>
<td>1</td>
</tr>
<tr>
<td>AGS-565</td>
<td>Farm Enterprise Swine Tech</td>
<td>1</td>
</tr>
</tbody>
</table>
AGS-566 Farm Enterprise Swine Mgt ........................................1
AGS-563 Farm Enterprise Exp Cow-Calf ................................1
AGS-564 Farm Enterprise Forage Mgt ....................................1
AGB-439 Commodity Marketing Lab ......................................1
AGA-840 Agronomy Lab .....................................................1
AGB-308 Farm Machinery Mgt Lab ........................................1
Total ...................................................................................76

**Associate Degree Nursing**

**Associate in Applied Science**

*Location: Emmetsburg Campus* (Day, Full-time Program)

Algonka & Spencer Campuses (Evening/Weekend, Part-time program)

Admission to the Associate Degree Nursing program follows the guidelines outlined in the Prospective Nursing Student Bulletin and/or Nursing Program Student Handbook. All coursework must be completed with a grade of “C” or higher.

Graduates are eligible to take the RN NCLEX licensure exam at the end of the corresponding program. The nursing program is approved by the Iowa Lakes Community College Board of Trustees, the State Board of Education and the Iowa Board of Nursing.

Students who have completed a LPN program other than at Iowa Lakes must meet Iowa Lakes Community College course competencies.

The following are considered prerequisites & must be taken BEFORE enrolling in any Nursing courses (PNN or ADN).

1. Two semesters of high school chemistry with a grade of “C” or higher or a four credit college chemistry (CHM-151 College Chemistry I and Lab) with a grade of “C” or higher.
2. Successfully complete and pass a state approved 75 hour Certified Nurse Aid course (HSC-172). Must be active on the Direct Care Worker registry. New requirement for students entering program in Fall 2009.
3. One year of high school algebra with a grade of “C” or higher or a three credit college math course (MAT-110 Math for Liberal Arts). New requirement for students entering program in Fall 2009.

**Required Courses Credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HSC-186</td>
<td>Human Growth &amp; Development</td>
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</tr>
<tr>
<td>PSY-121</td>
<td>Developmental Psychology</td>
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<tr>
<td>HSC-163</td>
<td>Nutrition</td>
<td>OR</td>
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<tr>
<td>BIO-151</td>
<td>Nutrition</td>
<td>3</td>
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<tr>
<td>BIO-168</td>
<td>Anatomy &amp; Physiology I and Lab</td>
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<tr>
<td>PNN-141</td>
<td>Fundamentals of Nursing Skills Lab</td>
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<tr>
<td>PNN-722</td>
<td>Fundamentals of Nursing Clinical</td>
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<td>PNN-101</td>
<td>Math for Health Professionals</td>
<td>1</td>
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<tr>
<td>BIO-173</td>
<td>Anatomy &amp; Physiology II and Lab</td>
<td>4</td>
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<tr>
<td>PNN-421</td>
<td>Maternal &amp; Newborn Nursing</td>
<td>2</td>
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<tr>
<td>PNN-631</td>
<td>Adult &amp; Child Health Nursing</td>
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<tr>
<td>PNN-632</td>
<td>Nursing Care Lifespan - Clinical</td>
<td>3</td>
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<tr>
<td>ENG-105</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>SOC-110</td>
<td>Introduction to Sociology</td>
<td>3</td>
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<tr>
<td>PSY-111</td>
<td>Introduction to Psychology</td>
<td>3</td>
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<tr>
<td>BIO-186</td>
<td>Microbiology and Lab</td>
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<tr>
<td>SPC-101</td>
<td>Fund of Oral Communication</td>
<td>3</td>
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<tr>
<td>ADN-501</td>
<td>Nursing Interv in Adult Health I</td>
<td>7</td>
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<td>ADN-502</td>
<td>Nursing Interv in Adult Health I Cl</td>
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<tr>
<td>ADN-461</td>
<td>Nursing Interv in Mental Health</td>
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<td>ADN-401</td>
<td>Nursing Interv in Mat/Child Health</td>
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<tr>
<td>ADN-462</td>
<td>Nursing Interv in Mental Health Cl</td>
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<td>ADN-402</td>
<td>Nursing Interv in Mat/Child Health Cl</td>
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<td>ADN-506</td>
<td>Nursing Interv in Adult Health II</td>
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<tr>
<td>ADN-507</td>
<td>Nursing Interv in Adult Health II Cl</td>
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<tr>
<td>Approved Computer course</td>
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1 semester of Computer Applications in high school
Total ...................................................................................86

**Automotive Collision and Paint Technology**

**Associate in Applied Science**

*Location: Emmetsburg Campus*

**Required Courses Credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CRR-302</td>
<td>Introduction to Collision Repair</td>
<td>2</td>
</tr>
<tr>
<td>WEL-334</td>
<td>Trade &amp; Industry Welding</td>
<td>2</td>
</tr>
<tr>
<td>BUS-161</td>
<td>Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>CRR-326</td>
<td>Sheet Metal Repair Th</td>
<td>3</td>
</tr>
<tr>
<td>CRR-327</td>
<td>Sheet Metal Repair Lab</td>
<td>2</td>
</tr>
<tr>
<td>CRR-401</td>
<td>Non-Structural Repair Th</td>
<td>3</td>
</tr>
<tr>
<td>CRR-402</td>
<td>Non-Structural Repair Lab</td>
<td>2</td>
</tr>
<tr>
<td>CRR-203</td>
<td>Plastic Repairs Th</td>
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<tr>
<td>CRR-742</td>
<td>Estimating Theory</td>
<td>2</td>
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<tr>
<td>CRR-749</td>
<td>Estimating Lab</td>
<td>1</td>
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<tr>
<td>CRR-351</td>
<td>Collision Lab I</td>
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<tr>
<td>CRR-808</td>
<td>Refinishing I Theory</td>
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<tr>
<td>CRR-809</td>
<td>Refinishing I Lab</td>
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<tr>
<td>COM-725</td>
<td>Workplace Communications</td>
<td>2</td>
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<tr>
<td>CRR-908</td>
<td>Cooperative Education</td>
<td>2</td>
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<tr>
<td>MAT-770</td>
<td>Applied Math</td>
<td>2</td>
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<tr>
<td>CRR-540</td>
<td>Structural Repair Th</td>
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<tr>
<td>CRR-541</td>
<td>Structural Repair Lab</td>
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<tr>
<td>CRR-606</td>
<td>Mechanical Repairs Th</td>
<td>2</td>
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<tr>
<td>CRR-607</td>
<td>Mechanical Repairs Lab</td>
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<tr>
<td>CRR-838</td>
<td>Refinishing II Theory</td>
<td>2</td>
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<tr>
<td>CRR-839</td>
<td>Refinishing II Lab</td>
<td>3</td>
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<td>CRR-352</td>
<td>Collision Repair Lab II</td>
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<tr>
<td>ACC-111</td>
<td>Intro to Accounting (3 cr.)</td>
<td>OR</td>
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<tr>
<td>ACC-131</td>
<td>Principles of Accounting I</td>
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<tr>
<td>ENG-105</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>CSC-110</td>
<td>Introduction to Computers</td>
<td>3</td>
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<tr>
<td>BUS-183</td>
<td>Business Law</td>
<td>3</td>
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<tr>
<td>SPC-101</td>
<td>Fund of Oral Communication</td>
<td>3</td>
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<tr>
<td>+ Coordinator approved electives</td>
<td>12</td>
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</table>

Total ...................................................................................76

**Automotive Technology**

**Associate in Applied Science**

*Location: Emmetsburg Campus*

**Required Courses Credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AUT-115</td>
<td>Automotive Shop Safety</td>
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<tr>
<td>AUT-105</td>
<td>Intro to Automotive Technology</td>
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<tr>
<td>AUT-630</td>
<td>Automotive Electrical Systems</td>
<td>5</td>
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<tr>
<td>AUT-624</td>
<td>Automotive Electrical Systems Lab</td>
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<tr>
<td>BUS-126</td>
<td>Business Principles</td>
<td>3</td>
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<tr>
<td>WEL-334</td>
<td>Trade &amp; Industry Welding</td>
<td>2</td>
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<tr>
<td>AUT-180</td>
<td>Engine Repair Th</td>
<td>3</td>
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<tr>
<td>AUT-186</td>
<td>Engine Repair Lab</td>
<td>3</td>
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<tr>
<td>AUT-510</td>
<td>Brakes Theory</td>
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<tr>
<td>AUT-184</td>
<td>Brakes Lab</td>
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<tr>
<td>AUT-704</td>
<td>Automotive Heating &amp; Air Conditioning</td>
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<tr>
<td>AUT-410</td>
<td>Steering &amp; Suspension Theory</td>
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<tr>
<td>AUT-890</td>
<td>Automotive Tech OJT Training</td>
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<tr>
<td>AUT-260</td>
<td>Manual Transmission Theory</td>
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<tr>
<td>AUT-851</td>
<td>Automotive Engine Performance Diagnosis</td>
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<tr>
<td>AUT-413</td>
<td>Auto Suspension &amp; Steering Lab</td>
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<tr>
<td>COM-725</td>
<td>Workplace Communications</td>
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<tr>
<td>AUT-834</td>
<td>Automotive Fuel Systems</td>
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<td>AUT-827</td>
<td>Automotive Ignition Systems</td>
<td>4</td>
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<tr>
<td>AUT-842</td>
<td>Auto Computer Engine Control</td>
<td>4</td>
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<tr>
<td>MAT-772</td>
<td>Applied Math</td>
<td>3</td>
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<tr>
<td>AUT-313</td>
<td>Auto Manual Dr Train &amp; Axles</td>
<td>3</td>
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### Biorenewable Fuels Technology

**Associate in Applied Science**  
*Location: Emmetsburg Campus*

**Required Courses Credits**
- BPT-103 Intro to Biomass ................................................. 3
- BPT-106 Industry Terminology and Safety .............................. 3
- CSC-110 Intro to Computers .................................................. 3
- BUS-160 Human Relations ..................................................... 2
- WTT-123 Alternating Current Electrical Theory I ....................... 4
- BPT-110 Industrial Equipment ............................................... 3
- BPT-124 Mechanical Fundamentals-Process Control .................... 4
- COM-725 Workplace Communications OR .................................... 2
- ENG-105 Composition I .......................................................... 3
- WTT-113 Direct Current Electrical Theory .................................. 3
- MAT-110 Mathematics for Liberal Arts ...................................... 3
- BPT-932 Biomass Internship .................................................... 5
- BPT-107 Materials Management .............................................. 3
- BPT-201 Plant Process and Design (Bioresfining) ......................... 3
- BPT-113 Instrumentation (Automation-Process Control) .............. 4
- WEL-373 Industrial Technical Welding ..................................... 2
- BPT-130 Water Treatment ...................................................... 3
- BPT-108 Plant Management .................................................... 3
- AGC-200 Career Seminar ....................................................... 1
- ACC-111 Intro to Accounting .................................................. 3
- MGT-130 Principles of Supervision ......................................... 3
- Science (Chemistry or Biology) ................................................. 4
- Elective Credits .................................................................... 11-12

Total..................................................................................... 77

### Construction Technology

**Associate in Applied Science**  
*Location: Emmetsburg Campus*

**Required Courses Credits**
- CON-113 Construction Printreading ......................................... 2
- CON-137 Foundations and Concrete .......................................... 7
- CON-201 Framing Techniques and Lab I ................................. 2
- CON-202 Framing Techniques and Lab II .................................... 6
- CON-225 Techniques of Exterior Covering ............................... 6
- CON-217 Exterior Finishing ..................................................... 3
- CON-106 Construction Welding ................................................ 3
- CON-120 Construction Estimating ............................................ 1
- CON-229 Installation of Interior Finishing .............................. 3
- CON-228 Methods of Interior Finishing .................................... 3
- COM-725 Workplace Communications (2 cr.) .......................... 3
- ENG-105 Composition ............................................................ 3
- MAT-770 Applied Math ........................................................... 2
- BUS-161 Human Relations ....................................................... 3
- HSC-134 First Aid/CPR ............................................................ 1
- CON-431 Internship ............................................................... 6
- ACC-111 Intro to Accounting (3 cr.) ......................................... 3
+ Coordinator approved math course
- CSC-110 Introduction to Computers ........................................... 3
- SPC-101 Fund of Oral Communication ....................................... 3
+ Coordinator approved electives .......................................... 21

Total..................................................................................... 77

### Farm Equipment and Diesel Technology

**Associate in Applied Science**  
*Location: Emmetsburg Campus*

**Required Courses Credits**
- AGM-416 Combine & Impl Repair & Adj .................................. 4
- AGM-145 Farm Equipment Air Conditioning .............................. 4
- AGM-850 Dealership Experience ............................................. 2
- AGM-430 Differentials and Final Drives .................................... 6
- AGM-431 Transmissions ......................................................... 7
- AGM-114 Hydraulic I .............................................................. 2
- AGM-115 Hydraulic Components Lab ....................................... 3
- AGM-116 Fundamentals of Hydraulics ...................................... 3
- AGM-117 Fundamentals of Hydraulics Lab ................................. 2
- COM-723 Workplace Communications .................................... 3
- MAT-772 Applied Math ........................................................... 3
- AGM-413 Diesel Engine Overhaul ............................................ 5
- AGM-850 Dealership Experience ............................................. 2
- BUS-126 Business Principles ................................................. 3
- BUS-161 Human Relations ..................................................... 3
- BCA-212 Intro to Computer Business Apps .............................. 3
- AGM-420 Fuel Systems .......................................................... 2
- AGM-421 Fuel Systems Lab ..................................................... 3
- AGM-301 Fundamentals of Electricity ...................................... 3
- AGM-302 Electrical Components ............................................ 2
- AGM-303 Electrical Components Lab ....................................... 3
- WEL-334 Trade and Industry Welding ..................................... 2

Total..................................................................................... 78

### Hotel and Restaurant Management

**Associate in Applied Science**  
*Location: Emmetsburg Campus*

**Required Courses Credits**
- ACC-111 Intro to Accounting ............................................... 3
- BUS-121 Business Communications........................................... 3
- OR
- ENG-105 Composition ............................................................ 3
- HCM-105 Food Fundamentals .................................................. 4
- HCM-229 Nutrition for the Life Cycle ...................................... 4
- HCM-319 Intro to the Hospitality Field .................................... 4
- HCM-591 Housekeeping Management ...................................... 3
- HCM-705 Hospitality Club Activities I ..................................... 1
- HCM-265 Mathematics for Hospitality ..................................... 3
- HCM-595 Front Office Ops/Night Audit .................................... 4
- HCM-141 Food Production ...................................................... 5
- HCM-450 Job Seeking Skills I ............................................... 2
- HCM-707 Hospitality Club Activities II .................................... 1
- HCM-938 On-the-Job Training ............................................... 5
- HCM-593 Restaurant Management .......................................... 4
- HCM-104 Applied Food Service Sanitation ............................... 4
- HCM-237 Modified Diets ...................................................... 4
- HCM-709 Hospitality Club Activities III ................................... 1
- HCM-451 Job Seeking Skills II ............................................. 2
- HCM-594 Food and Beverage Mgt .......................................... 4
- HCM-592 Convention Management ........................................ 3
- HCM-711 Hospitality Club Activities IV ................................... 1
- HCM-310 Hospitality Law ..................................................... 3
- BUS-161 Human Relations ..................................................... 3
- AGM-411 Engine Repair .......................................................... 6

Total..................................................................................... 82

### Landscape and Turfgrass Technology

**Associate in Applied Science**  
*Location: Emmetsburg Campus*

**Required Courses Credits**
- AGH-126 Woody Plant Material .............................................. 4
- AGH-141 Equipment Operations ............................................. 3
- AGH-860 Horticulture Careers/Field trips ............................... 2
### Marine Service Technology

#### Associate in Applied Science

**Location:** Emmetsburg Campus

#### Required Courses Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
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<td>MSE-153</td>
<td>Fundamentals of Electricity</td>
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</tr>
<tr>
<td>MSE-151</td>
<td>Shop Safety and Procedures</td>
<td>1</td>
</tr>
<tr>
<td>HSC-134</td>
<td>First Aid/CPR</td>
<td>1</td>
</tr>
<tr>
<td>BUS-161</td>
<td>Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>MAT-770</td>
<td>Applied Math</td>
<td>2</td>
</tr>
<tr>
<td>MSE-164</td>
<td>Marine Engines 2/4 Stroke Th</td>
<td>2</td>
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<tr>
<td>MSE-165</td>
<td>Marine Engines 2/4 Stroke Lab</td>
<td>2</td>
</tr>
<tr>
<td>MSE-169</td>
<td>Marine Drive Systems Th &amp; Lab</td>
<td>2</td>
</tr>
<tr>
<td>COM-725</td>
<td>Workplace Communications</td>
<td>2</td>
</tr>
<tr>
<td>MSE-158</td>
<td>Snowmobile Systems</td>
<td>2</td>
</tr>
<tr>
<td>MSE-932</td>
<td>Internship</td>
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<tr>
<td>MSE-169</td>
<td>Marine Electrical Sysyems Th &amp; Lab</td>
<td>3</td>
</tr>
<tr>
<td>MSE-173</td>
<td>Marine Fuel Systems</td>
<td>3</td>
</tr>
<tr>
<td>MSE-183</td>
<td>Personal Watercraft Systems</td>
<td>3</td>
</tr>
<tr>
<td>CSC-110</td>
<td>Introduction to Computers</td>
<td>3</td>
</tr>
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<td>SPC-101</td>
<td>Fund of Oral Communication</td>
<td>3</td>
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<tr>
<td>+Coordinator approved electives</td>
<td>18 credits minimum</td>
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#### Required Courses Credits

Complete one of the following two options:

**Option 1: Advanced Business Management**

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<th>Credits</th>
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<tbody>
<tr>
<td>ACC-111</td>
<td>Intro to Accounting (3 cr.)</td>
<td>3</td>
</tr>
<tr>
<td>ACC-131</td>
<td>Principles of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>ENG-105</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BUS-183</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS-102</td>
<td>Intro to Business</td>
<td>3</td>
</tr>
<tr>
<td>SPC-101</td>
<td>Fund of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>+Coordinator approved electives</td>
<td>12 credits minimum</td>
<td></td>
</tr>
</tbody>
</table>

**Option 2: Advanced Marine Service Technology**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSE-150</td>
<td>Shop Management</td>
<td>3</td>
</tr>
<tr>
<td>MSE-252</td>
<td>Marine Advanced Driveability</td>
<td>3</td>
</tr>
<tr>
<td>MSE-266</td>
<td>Marine Advanced Electrical</td>
<td>3</td>
</tr>
<tr>
<td>MSE-273</td>
<td>Marine Advanced Fuel Systems</td>
<td>3</td>
</tr>
<tr>
<td>BUS-125</td>
<td>Business Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS-183</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>+Coordinator approved electives</td>
<td>12 credits minimum</td>
<td></td>
</tr>
</tbody>
</table>

**Total** ..................................................................................... 60

### Medical Office Technology

#### Associate in Applied Science

**Location:** Spencer Campus

#### Required Courses Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC-111</td>
<td>Intro to Accounting (3 cr.)</td>
<td>3</td>
</tr>
<tr>
<td>ACC-161</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC-311</td>
<td>Computer Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ADM-116</td>
<td>Keyboarding II</td>
<td>3</td>
</tr>
<tr>
<td>HSC-114</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BCA-134</td>
<td>Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>HSC-217</td>
<td>Introduction to Pathology</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111</td>
<td>Intro to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPC-101</td>
<td>Fund of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>+Coordinator approved electives</td>
<td>5-6 credits minimum</td>
<td></td>
</tr>
</tbody>
</table>

**Total** ..................................................................................... 76

### Medical Assistant

#### Associate in Applied Science

**Location:** Spencer Campus

The Medical Assistant Diploma and AAS Degree Programs, Spencer Campus, are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (AAMAE).

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

1361 Park Street Clearwater, FL 33756

Phone: 727-210-2350

#### Required Courses Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC-111</td>
<td>Intro to Accounting (3 cr.)</td>
<td>3</td>
</tr>
<tr>
<td>ACC-310</td>
<td>Computer Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ADM-106</td>
<td>Intro to Keyboarding OR</td>
<td>2</td>
</tr>
<tr>
<td>ADM-116</td>
<td>Keyboarding II</td>
<td>3</td>
</tr>
<tr>
<td>HSC-114</td>
<td>Medical Terminology</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>BIO-163</td>
<td>Essentials of Anatomy &amp; Phys</td>
<td>4</td>
</tr>
<tr>
<td>MAT-110</td>
<td>Math for Liberal Arts</td>
<td>3</td>
</tr>
<tr>
<td>MAP-128</td>
<td>Automated Medical Office</td>
<td>2</td>
</tr>
<tr>
<td>MAP-453</td>
<td>Med Assist Mental Hlth Cncpts</td>
<td>2</td>
</tr>
<tr>
<td>MAP-111</td>
<td>Medical Office Management I</td>
<td>3</td>
</tr>
<tr>
<td>MAP-117</td>
<td>Medical Office Management II</td>
<td>3</td>
</tr>
<tr>
<td>MAP-402</td>
<td>Medical Law and Ethics</td>
<td>2</td>
</tr>
<tr>
<td>MAP-233</td>
<td>Medical Laboratory Procedures</td>
<td>4</td>
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<tr>
<td>MAP-515</td>
<td>Pharmacology</td>
<td>3</td>
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<tr>
<td>MAP-342</td>
<td>Clinical Assisting I</td>
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<tr>
<td>MAP-343</td>
<td>Clinical Assisting II</td>
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<tr>
<td>MAP-941</td>
<td>Practicum</td>
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<tr>
<td>MAP-253</td>
<td>Limited Radiology I</td>
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<tr>
<td>MAP-254</td>
<td>Limited Radiology II</td>
<td>4</td>
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<tr>
<td>MAP-330</td>
<td>Career Prep Medical Assistant</td>
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<tr>
<td>HSC-217</td>
<td>Introduction to Pathology</td>
<td>3</td>
</tr>
<tr>
<td>PSY-111</td>
<td>Intro to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SPC-101</td>
<td>Fund of Oral Communication</td>
<td>3</td>
</tr>
<tr>
<td>SOC-110</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** ..................................................................................... 77

#### Business Professionalism Courses

(complete all 4 courses with a minimum of 2 credits total)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADM-254</td>
<td>Business Professionalism</td>
<td>0-1</td>
</tr>
<tr>
<td>ADM-255</td>
<td>Business Professionalism II</td>
<td>0-1</td>
</tr>
<tr>
<td>ADM-354</td>
<td>Business Professionalism III</td>
<td>0-1</td>
</tr>
<tr>
<td>ADM-355</td>
<td>Business Professionals IV</td>
<td>0-1</td>
</tr>
</tbody>
</table>

**Total** ..................................................................................... 77
Motorcycle and Small Engine Technology

Associate in Applied Science
Location: Emmetsburg Campus

Required Courses Credits
MSE-143 Small Engines Theory .............................................3
MSE-146 Small Engines Lab ....................................................3
MSE-153 Fundamentals of Electricity ......................................3
MSE-152 Drive System Fundamentals ....................................2
BUS-161 Human Relations ....................................................3
MAT-770 Applied Math ..........................................................2
MSE-171 Motorcycle Fuel Systems ........................................3
MSE-183 Personal Watercraft Systems .................................3
MOT-910 Cooperative Work Experience ..............................4

Complete one of the following two options:

Option 1: Advanced Business Management
ACC-111 Intro to Accounting (3 cr.) .....................................OR
ACC-131 Principles of Accounting .......................................4
ENG-105 Composition I ......................................................3
CSC-110 Introduction to Computers .....................................3
BUS-183 Business Law .......................................................3
SPC-101 Fund of Oral Communication .................................3
+ Coordinator approved electives .......................... 18 credits minimum

Option 2: Advanced Motorcycle & Small Engine
MOT-210 Advanced Drivability and Troubleshooting ..............3
MOT-240 Dyno Analysis .......................................................2
MOT-275 Introduction to Hydraulics ....................................2
MOT-230 Advanced Fuel Systems .......................................3
MOT-220 Advanced Electrical Diag & Troubleshooting ..........3
MOT-255 Performance Engine Tuning ..................................2
BUS-125 Business Principles ...............................................2
MOT-250 Outdoor Power Equipment ....................................3
MSE-158 Snowmobile Systems ..............................................2
MSE-260 Shop Management .................................................3
MOT-202 ATV Systems ..........................................................3
CSC-110 Intro to Computers ................................................3
MOT-200 Motorcycle & ATV Tune Up and Maintenance .......2
Total ..............................................................................77

Paramedic Specialist

Associate in Applied Science
Location: Emmetsburg Campus

Required Courses Credits
EMS-611 EMT-B and Lab .......................................................6
BIO-163 Essentials of Anatomy & Phys ...............................4
HSC-114 Medical Terminology ..............................................3
EMS-612 Paramedic Spec – Prep and Lab ..............................6
MAT-110 Math for Liberal Arts ..............................................3
ENG-105 Composition I ........................................................3
EMS-615 Paramedic Spec – Clinical .......................................3
EMS-616 Paramedic Spec – Field .........................................3
EMS-613 Paramedic Spec – Airway, Patient Asses & Lab...6
EMS-628 Paramedic Spec – Medical I & Lab ........................6
EMS-629 Paramedic Spec – Medical II & Lab .........................6
EMS-624 Paramedic Spec – Special Consid & Lab .................4
BUS-161 Human Relations ....................................................3
EMS-614 Paramedic Spec – Trauma & Lab ..............................4
EMS-626 Paramedic Spec – Clinical II ....................................4
EMS-625 Paramedic Spec – Assess Based Mgt Op & Lab 4
EMS-627 Paramedic Spec – Field II ......................................4
SPC-101 Fundamentals of Oral Communications .................3
Total ..............................................................................75

Surgical Technology

Associate in Applied Science
Location: Spencer Campus

The Surgical Technology Diploma and AAS Degree Programs, Spencer Campus, are accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Accreditation Review Committee on Education Surgical Technology (ARCST). Commission on Accreditation of Allied Health Education Programs (CAAEHP)

Required Courses Credits
BIO-163 Essentials of Anatomy & Phys ...............................4
SUR-430 Microbiology – Surgical Tech ...............................4
SUR-121 Surgical Techniques ..............................................6
SUR-122 Intro to Surgical Technology .................................4
SUR-123 Patient Care Concepts ...........................................2
HSC-114 Medical Terminology .............................................3
SUR-223 Surgical Procedures ...............................................6
SUR-420 Pharmacology for Surg Tech .................................2
ADM-220 Career Development ..........................................1
SUR-227 Surgical Procedures Lab .......................................2
SUR-440 Biomedical Science for Surg Tech .........................2
SUR-520 Surgical Tech Practicum I ................................. 2
SUR-222 Surgical Techniques II ...........................................2
ENG-105 Composition I .......................................................3
SUR-519 Surgical Technology Practicum .............................4
CSC-110 Intro to Computers ................................................3
PSY-111 Intro to Psychology .................................................3
SOC-110 Intro to Sociology ..................................................3
MAT-110 Math for Liberal Arts .............................................3
SPC-101 Fundamentals of Oral Communications .................3
+ Coordinator approved electives .............................. 13 credits minimum
Humanties Elective ...........................................................3
Total ..............................................................................76

Wind Energy and Turbine Technology

Associate in Applied Science
Location: Estherville Campus

Required Courses Credits
WTI-114 Field Training and Project Operations ...................5
WTI-118 Direct Current Electrical Theory ......................... 4
WTI-123 Alternating Current Electrical Th I .......................4
WTI-103 Introduction to Wind Energy .................................3
CSC-110 Intro to Computers ................................................3
MAT-102 Intermediate Algebra (4 cr.) .................................OR
MAT-101 Intermediate Algebra ...........................................3
BUS-161 Human Relations ....................................................3
WTT-244 Alternating Current Electrical Th II .......................4
WTI-133 Wind Turbine Mechanical Sysst ......................... 3
WTT-126 Basic Hydraulics ....................................................4
WTT-134 Electric Motors and Generators ......................... 4
WTT-201 Wind Turbine Site Constr & Locations .................1
WTT-932 Wind Turbine Internship ......................................5
BUS-121 Business Communications ...................................3
WTT-214 Basic Networking and Comp Tech .......................3
WTT-245 Electrical Practical Applications ....................... 4
WTT-223 Airfoils and Composite Repair ......................... 4
WTT-225 Data Acquisition & Assessment ......................... 4
WTT-235 Programmable Logic Control Sysst ................. 4
WTT-204 Wind Turbine Siting ...............................................4
WTT-216 Power Generation and Transmission ..................3
GTT-101 Principles of Management ..................................3
Approved Science Elective .............................................. 4
Total ............................................................................80
Vocational Programs

Vocational programs are those which include at least the equivalent of two full-time semesters but are less than two academic years in length. A diploma is awarded upon successful completion.

Programs are available in the following areas:

- Accounting
- Auto Collision and Paint Technology
- Broadcast Media
- Child Care
- Construction Technology
- Graphic Specialist
- Landscape & Turfgrass Technician
- Marine Service Technology
- Massage Therapy
- Medical Assistant Specialist
- Medical Office Technologist Coding
- Medical Office Technologist Transcription
- Motorcycle and Small Engine Technology
- Office Specialist
- Paraeducation
- Parts Sales and Inventory Control
- Pharmacy Technology
- Photography
- Practical Nursing
- Sales and Marketing
- Secretarial Specialist
- Surgical Technology
- Web Development and Design
- Welding
- Wind Energy and Turbine Technology

Accounting

Diploma
Location: Estherville Campus

Required Courses Credits

- ACC-131 Principles of Accounting I ........................................4
- ACC-161 Payroll Accounting ................................................3
- ACC-313 Principles of Accounting II ......................................4
- ACC-310 Computer Accounting ..............................................2
- CSC-110 Introduction to Computers .......................................3
- BUS-175 Business Seminar I ...............................................1
- SPC-101 Fund of Oral Communication ..................................3
- ENG-105 Composition I .......................................................3
- ACC-261 Income Tax Accounting ..........................................3
- Approved Mathematics Elective ...........................................3
- Approved Social Science Elective .......................................3
- Approved Humanities Elective .............................................3
Total .....................................................................................35

Auto Collision and Paint Technology

Diploma
Location: Emmetsburg Campus

Required Courses Credits

- CRR-302 Introduction to Collision Repair ..............................2
- WEL-334 Trade & Industry Welding ....................................2
- BUS-161 Human Relations ..................................................3
- CRR-326 Sheet Metal Repair Th .......................................3
- CRR-327 Sheet Metal Repair Lab .........................................2
- CRR-401 Non-Structural Repair Th .....................................2
CRR-402 Non-Structural Repair Lab ....................................2
CRR-203 Plastic Repairs Th ................................................2
CRR-742 Estimating Theory ................................................2
CRR-749 Estimating Lab ......................................................1
CRR-351 Collision Lab I ......................................................2
CRR-808 Refinishing I Theory ...............................................1
CRR-809 Refinishing I Lab ....................................................3
COM-725 Workplace Communications ................................2
CRR-908 Cooperative Education .........................................2
MAT-770 Applied Math .......................................................2
CRR-540 Structural Repair Th .............................................3
CRR-541 Structural Repair Lab ...........................................2
CRR-806 Mechanical Repairs Th .........................................2
CRR-607 Mechanical Repairs Lab .......................................1
CRR-838 Refinishing II Theory ............................................2
CRR-839 Refinishing II Lab ...................................................3
CRR-352 Collision Repair Lab II .........................................2
Total .....................................................................................49

Broadcast Media

Diploma
Location: Estherville Campus

Required Courses Credits

- MMS-105 Audio Production ................................................3
- MMS-115 TV Studio Production ............................................3
- SPC-101 Fundamentals of Oral Communications ..................3
- MMS-130 Video Field Production ......................................3
- MMS-211 Advanced Video Editing ......................................3
- MKT-140 Principles of Selling ............................................3
- MMS-225 Advanced Television Production .........................3
- MMS-234 Radio Workshop .................................................4
- JOU-121 Newswriting & Reporting ....................................3
- JOU-210 Media Law and Ethics .........................................3
- Approved Mathematics/Science Electives ............................7
Total .....................................................................................38

Child Care

Diploma
Location: Emmetsburg Campus

To advance in the program course sequence or to graduate a student may have no grade lower than 'C' in any Early Childhood Education (ECE) course or in course EDU-235.

Required Courses Credits

- CSC-110 Introduction to Computers ....................................3
- ECE-170 Child Growth and Development ............................3
- ECE-110 Child Care Professionals I .................................1
- ECE-112 Portfolio Development I ......................................1
- ECE-133 Child Health, Safety and Nutrition .........................3
- ECE-103 Intro to Early Childhood Education ......................3
- ECE-111 Child Care Professionals II .................................1
- ECE-158 Early Childhood Curriculum I .............................3
- ECE-159 Early Childhood Curriculum II .............................3
- ECE-262 Early Childhood Field Experience .........................3
- ECE-243 Early Childhood Guidance ..................................3
- EDU-235 Children’s Literature ...........................................3

PENDING - Spanish for Professionals:Education ..................2
SPC-101 Fund of Oral Communication ................................3
Total .....................................................................................35
Construction Technology
Diploma
Location: Emmetsburg Campus

Required Courses Credits
CON-113 Construction Printreading ...........................................2
CON-137 Foundations and Concrete ...........................................7
CON-201 Framing Techniques and Lab I ....................................2
CON-202 Framing Techniques and Lab II ....................................6
CON-225 Techniques of Exterior Covering ................................6
CON-217 Exterior Finishing .....................................................3
CON-106 Construction Welding ...............................................OR
CON-120 Construction Estimating .........................................1
CON-229 Installation of Interior Finishing .................................3
CON-228 Methods of Interior Finishing ....................................3
ENG-105 Composition I (3cr.) ...............................................OR
COM-770 Applied Math .........................................................2
BUS-161 Human Relations .......................................................3
HSC-134 First Aid/CPR ........................................................1
CON-431 Internship ..........................................................6
Total .....................................................................................47

Graphic Specialist
Diploma
Location: Estherville Campus

Required Courses Credits
MMS-101 Mass Media ........................................................3
GRA-234 Dreamweaver Level I ................................................3
GRA-118 Electronic Publishing ..............................................3
GRA-140 Digital Imaging .......................................................3
GRA-188 Advertising Layout & Composition ..........................3
JOU-171 Introduction to Photography ..................................OR
JOU-173 Digital Photography ................................................3
ENG-105 Composition I ........................................................3
ART-127 Digital Illustration ...................................................3
GRA-121 Digital Drawing ........................................................3
GRA-932 Internship ..............................................................4
Approved Mathematics Elective ...........................................3
Total .....................................................................................34

Landscape and Turfgrass Technology
Diploma
Location: Emmetsburg Campus

Required Courses Credits
AGH-126 Woody Plant Material ................................................4
AGH-141 Equipment Operations .............................................3
AGH-860 Horticulture Careers/Field Trips .............................2
AGH-117 Weed Identification ................................................2
BUS-161 Human Relations .....................................................3
AGA-156 Introduction to Soils .................................................3
CSC-110 Introduction to Computers ......................................3
AGH-405 Golf Course Maintenance .....................................3
AGH-128 Plant Material II .....................................................4
AGH-113 Turfgrass Management .........................................3
PENDING Landscape Maintenance ..................................3
PENDING Horticulture Math ................................................3
AGH-129 Plant Material III ....................................................3
COM-723 Workplace Communications .................................3
AGH-850 Occupational Experience I ..................................4
Total .....................................................................................49

Marine Service Technology
Diploma
Location: Emmetsburg Campus

Required Courses Credits
MSE-147 Introduction to Marine Service ................................2
MSE-148 Introduction to Marine Detailing .............................1
MSE-149 Introduction to Marine Rigging ...............................2
CSC-110 Introduction to Computers .......................................3
MSE-151 Shop Safety and Procedures ................................1
HSC-134 First Aid/CPR ........................................................1
BUS-161 Human Relations ....................................................3
MAT-770 Applied Math .........................................................2
MSE-164 Marine Engines 2/4 Stroke Th ................................2
MSE-165 Marine Engines 2/4 Stroke Lab ............................2
MSE-169 Marine Drive Sys Ts Th & Lab ...............................3
COM-725 Workplace Communications ..............................2
MSE-158 Snowmobile Systems ...........................................2
MSE-932 Internship ............................................................4
MSE-189 Marine Electrical Sys Ts Th & Lab .........................3
MSE-173 Marine Fuel Systems ............................................3
MSE-183 Personal Watercraft Systems ...............................3
Total .....................................................................................44

Massage Therapy
Diploma
Location: Spencer Campus

Required Courses Credits
MST-103 Intro to Swedish Massage .........................................3
HSC-114 Medical Terminology ..............................................3
MST-152 Chair Massage .........................................................1
MST-101 Health and Wellness .................................................1
BIO163 Essentials of Anatomy & Phys ..................................4
COM-725 Workplace Communications ..............................2
MST-113 Kinesiology/Anatomy in Clay ................................3
MST-123 Sports Massage ......................................................3
MST-139 Spa Bodywork .........................................................2
MST-121 Reflexology ...........................................................1
MST-110 Pathology for Massage Therapy ............................2
MST-149 Pregnancy/Infant Massage ......................................1
MST-141 Geriatric Massage ...................................................1
MST-143 Intermediate Massage ............................................3
MST-153 Deep Tissue Massage .............................................3
MST-151 Business – Massage Therapy ...............................1
BUS-160 Human Relations ...................................................2
MST-810 Clinic .................................................................1
MST-159 Ethics – Massage Therapy .....................................1
Total .....................................................................................38
Medical Assistant Specialist
Diploma
Location: Spencer Campus
The Medical Assistant Diploma and AAS Degree Programs, Spencer Campus, are accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (AAMAE); Commission on Accreditation of Allied Health Education Programs (CAAHEP)
1361 Park Street Clearwater, FL 33756
Phone: 727-210-2350

Required Courses Credits
HSC-114 Medical Terminology .............................................. 3
MAP-111 Medical Office Management I .................................. 3
MAP-342 Clinical Assisting I .............................................. 3
HSC-217 Introduction to Pathology .................................. 3
MAP-402 Medical Law and Ethics ..................................... 2
CSC-110 Introduction to Computers .................................. 3
MAP-343 Clinical Assisting II ........................................... 3
MAP-515 Pharmacology .............................................. 3
MAP-233 Medical Laboratory Procedures ........................ 4
MAP-453 Med Assist Mental Hlth Cncpts ....................... 2
MAP-330 Career Prep Medical Assistant ....................... 1
MAP-128 Automated Medical Office ............................... 2
MAP-941 Practicum ............................................... 3
ENG-105 Composition I .............................................. 3
BIO-163 Essentials of Anatomy & Physiology ................ 4
Total ........................................................................ 47

Medical Office Technologist Coding
Diploma
Location: Spencer Campus

Required Courses Credits
ADM-116 Keyboarding II ................................................ 3
HSC-114 Medical Terminology ........................................ 3
BUS-161 Human Relations ......................................... 3
CSC-110 Introduction to Computers ............................. 3
MAP-128 Automated Medical Office .............................. 2
BIO-163 Essentials of Anatomy & Physiology .............. 4
HSC-217 Introduction to Pathology ..................................... 3
MAP-111 Medical Office Management I ......................... 3
MAP-117 Medical Office Management II ......................... 3
ENG-101 Elements of Writing ...................................... 3
MAP-141 Medical Insurance ........................................ 3
HIT-244 Basic CPT Coding ........................................ 3
HIT-245 Basic ICD-9-CM Coding ..................................... 3
Total ........................................................................ 39

Medical Office Technologist Transcription
Diploma
Location: Spencer Campus

Required Courses Credits
ADM-116 Keyboarding II ................................................ 3
HSC-114 Medical Terminology ........................................ 3
BCA-134 Word Processing .......................................... 3
BUS-161 Human Relations ......................................... 3
CSC-110 Introduction to Computers ............................. 3
MAP-128 Automated Medical Office .............................. 2
BIO-163 Essentials of Anatomy & Physiology .............. 4
HSC-217 Introduction to Pathology ..................................... 3
MAP-111 Medical Office Management I ......................... 3
MAP-117 Medical Office Management II ......................... 3
MAP-133 Medical Transcription .................................... 3
ENG-101 Elements of Writing ...................................... 3
MAP-135 Medical Transcription II ............................... 3
SPC-101 Fund of Oral Communication .......................... 3
Total ........................................................................ 42

Motorcycle and Small Engine Technology
Diploma
Location: Emmetsburg Campus

Required Courses Credits
MSE-143 Small Engines Theory ....................................... 3
MSE-146 Small Engines Lab .......................................... 3
MSE-153 Fundamentals of Electricity ............................ 3
MSE-152 Drive System Fundamentals ............................ 2
BUS-161 Human Relations ......................................... 3
MAT-770 Applied Math .............................................. 2
MSE-151 Shop Safety and Procedures ............................. 1
HSC-134 First Aid/CPR ............................................. 1
MOT-128 Motorcycle Engines 2/4 Stroke ....................... 2
MOT-129 Motorcycle Eng 2/4 Stroke Lab ....................... 2
MOT-146 Motorcycle Ignit & Elect Sysys ......................... 3
MOT-270 Introduction to Diesel ........................................ 2
MOT-143 Drive Syst/Chassis/Suspen ............................... 3
WEL-334 Trade & Industry Welding .............................. 2
COM-725 Workplace Communications ........................... 2
MOT-139 Motorcycle Fuel Systems .................................. 3
MSE-183 Personal Watercraft Systems ............................ 3
MOT-910 Cooperative Work Experience ............................ 4
Total ........................................................................ 44

Office Specialist
Diploma
Location: Emmetsburg Campus

Required Courses Credits
ACC-111 Intro to Accounting ........................................ 3
ACC-161 Payroll Accounting ........................................ 3
ACC-310 Computer Accounting ...................................... 2
ADM-254 Business Professionalism .................................. 1
ADM-255 Business Professionalism II ............................. 1
ADM-132 Business Math & Calculators ............................. 2
ADM-116 Keyboarding II .............................................. 3
ADM-936 Occupational Experience (5 cr.) .................... 3
ADM-941 Practicum (5cr.) ............................................ 3
BUS-938 Office on the Job Training (5 cr.) ...................... 3
ADM-162 Office Procedures .......................................... 3
BCA-134 Word Processing ......................................... 3
BUS-160 Human Relations ......................................... 2
BCA-185 Beginning Web Page Dev. .............................. 3
CSC-110 Introduction to Computers .............................. 3
ENG-105 Composition I .............................................. 3
SPC-101 Fund of Oral Communication .......................... 3
Total ........................................................................ 40

Paraeducation
Diploma
Location: Estherville Campus

Required Courses Credits
ENG-105 Composition I .............................................. 3
DSV-135 Assessment and Instruction .............................. 3
DSV-155 Services and Vocational Planning ...................... 4
SPC-101 Fund of Oral Communication .......................... 3
HSV-225 Counseling Skills .......................................... 4
PSY-111 Introduction to Psychology .............................. 3
HSV-162 Intro to Human Disabilities & Services ............. 3
Approved Science Elective .......................................... 3
Approved Social Science Elective ................................... 4
Total Credits ............................................................ 34
Parts Sales and Inventory Control
Diploma
Location: Emmetsburg Campus

Required Courses Credits
ACC-111 Intro to Accounting ..............................................3
MGT-101 Principles of Management ..................................3
BUS-932 Practicum .........................................................5
BUS-161 Human Relations ................................................3
CSC-110 Introduction to Computers ....................................3
MKT-140 Principles of Selling ...........................................3
MKT-150 Principles of Advertising .....................................3
COM-725 Workplace Communications ...............................2
PAR-113 Parts Catalog and Lab .........................................3
PAR-123 Parts System and Lab ..........................................4
PAR-124 Inventory Control and Lab ....................................3
MAT-772 Applied Math ...................................................3
Approved Elective ............................................................3
Total ................................................................................41

Pharmacy Technology
Diploma
Location: Spencer Campus

Required Courses Credits
BIO-163 Essentials of Anatomy & Phys ................................4
PHR-107 Pharmacy Tech I ................................................7
CSC-110 Introduction to Computers ....................................3
PHR-117 Pharmacy Tech II .............................................7
SPC-101 Fund of Oral Communication ...............................3
CHM-151 College Chemistry I .........................................4
ENG-105 Composition I ..................................................3
PHR-941 Practicum ..........................................................3
PHR-121 Pharmacy Technician Seminar .............................1
BUS-161 Human Relations ..............................................3
Total ................................................................................38

Photography
Diploma
Location: Estherville Campus

Required Courses Credits
JOU-171 Introduction to Photography ..................................3
JOU-173 Digital Photography .............................................3
ENG-105 Composition I ..................................................3
SPC-101 Fund of Oral Communication ...............................3
BUS-161 Human Relations ..............................................3
JOU-176 News & Forensic Photography ..............................3
ART-286 Photography: Portraiture .....................................3
GRA-140 Digital Imaging ..................................................3
MGT-110 Small Business Management ...............................3
MKT-150 Principles of Advertising ....................................3
MKT-140 Principles of Selling ...........................................3
JOU-941 Practicum ..........................................................2
Approved Science Elective ..............................................4
Total ................................................................................36

Practical Nursing
Diploma
Location: Emmetsburg Campus (Day, Full-time Program)

Algon & Spirit Lake Campuses (Evening/Weekend, Part-time Program)

Admission to the Associate Degree Nursing program follows the guidelines outlined in the Prospective Nursing Student Bulletin and/or Nursing Program Student Handbook. All coursework must be completed with a grade of “C” or higher.

Graduates are eligible to take the RN NCLEX licensure exam at the end of the corresponding program. The nursing program is approved by the Iowa Lakes Community College Board of Trustees, the State Board of Education and the Iowa Board of Nursing.

Students who have completed a LPN program other than at Iowa Lakes must meet Iowa Lakes Community College course competencies.

The following are considered prerequisites & must be taken BEFORE enrolling in any Nursing (PNN or ADN courses).

1. Two semesters of high school chemistry with a grade of “C” or higher or a four credit college chemistry (CHM-151 College Chemistry I and Lab) with a grade of “C” or higher.
2. Successfully complete and pass a state approved 75 hour Certified Nurse Aid course (HSC-172). Must be active on the Direct Care Worker registry. New requirement for students entering program in Fall 2009.
3. One year of high school algebra with a grade of “C” or higher or a three credit college math course (MAT-110 Math for Liberal Arts). New requirement for students entering program in Fall 2009.

Required Courses Credits
HSC-186 Human Growth and Dev ................................... OR
PSY-121 Developmental Psychology .................................3
HSC-163 Nutrition ........................................................... OR
BIO-151 Nutrition ............................................................3
BIO-168 Human Anatomy and Physiology I and Lab ........4
PNN-141 Fundamentals of Nursing Skills Lab .................4
PNN-722 Fundamentals of Nursing Clinical .......................2
PNN-101 Math for Health Professionals ...........................1
BIO-173 Human Anatomy and Physiology II and Lab .......4
PNN-421 Maternal and Newborn Nursing .........................2
PNN-631 Adult and Child Health Nursing .......................9
PNN-632 Nursing Care Lifespan - Clinical .......................3
ENG-105 Composition I ..................................................3

Complete 1 of the 2 options listed below:
Option 1 - For those completing Practical Nursing diploma
PNN-345 Dimensions of Practical Nursing .........................2
PNN-721 Dimensions of Practical Nursing Clinical ............3

Option 2 - For those accepted to the ADN Nursing program
PSY-111 Introduction to Psychology .................................3
SOC-110 Introduction to Sociology ...................................3
BIO-186 Microbiology ...................................................4
Total ................................................................................43
### Sales and Marketing

**Diploma**  
*Location: Emmetburg Campus*

#### Required Courses Credits

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<td>Business Professionalism</td>
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<td>ADM-255</td>
<td>Business Professionalism II</td>
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<td>ADM-132</td>
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<td>ADM-116</td>
<td>Keyboarding II</td>
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<td>BCA-134</td>
<td>Word Processing</td>
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<tr>
<td>BUS-160</td>
<td>Human Relations</td>
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<td>BCA-185</td>
<td>Beginning Web Page Dev</td>
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<tr>
<td>CSC-110</td>
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<td>ENG-105</td>
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### Secretarial Specialist

**Diploma**  
*Location: Emmetburg Campus*

#### Required Courses Credits

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### Surgical Technology

**Diploma**  
*Location: Spencer Campus*

The Surgical Technology Diploma and AAS Degree Programs, Spencer Campus, are accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Accreditation Review Committee on Education Surgical Technology (ARCST).

#### Required Courses Credits

<table>
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<tr>
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<tr>
<td>MAT-770</td>
<td>Applied Math</td>
<td>2</td>
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<tr>
<td>BUS-161</td>
<td>Human Relations</td>
<td>3</td>
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<tr>
<td>WEL-121</td>
<td>Oxy Fuel Welding and Cutting</td>
<td>4</td>
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<tr>
<td>WEL-160</td>
<td>Arc Welding I (SMAW)</td>
<td>3</td>
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<tr>
<td>WEL-111</td>
<td>Welding Blueprint Reading</td>
<td>3</td>
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<td>WEL-158</td>
<td>Structural Welding</td>
<td>4</td>
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<tr>
<td>WEL-128</td>
<td>Brazing/Soldering</td>
<td>2</td>
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<td>WEL-180</td>
<td>GMAW/GTAW</td>
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<td>WEL-183</td>
<td>GMAW/GTAW</td>
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<td>WEL-310</td>
<td>Pipe Welding</td>
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<td>WEL-179</td>
<td>Special Processes/Procedures</td>
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### Web Development and Design

**Diploma**  
*Location: Estherville Campus*

#### Required Courses Credits

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<td>Digital Imaging</td>
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<td>CSC-110</td>
<td>Introduction to Computers</td>
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<td>GRA-234</td>
<td>Dreamweaver Level I</td>
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<td>MKT-150</td>
<td>Principles of Advertising</td>
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<td>GRA-121</td>
<td>Digital Drawing</td>
<td>3</td>
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<tr>
<td>GRA-162</td>
<td>Web Page Graphics</td>
<td>3</td>
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<tr>
<td>MKT-110</td>
<td>Principles of Marketing</td>
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<td>ENG-105</td>
<td>Composition I</td>
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<td>GRA-932</td>
<td>Web Design Internship</td>
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<td>Humanities Elective</td>
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### Welding

**Diploma**  
*Location: Emmetburg Campus*

#### Required Courses Credits

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<th>Course Title</th>
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### Wind Energy and Turbine Technology

**Diploma**  
*Location: Estherville Campus*

#### Required Courses Credits

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<td>WTT-114</td>
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<td>WTT-118</td>
<td>Direct Current Electrical Theory</td>
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<td>WTT-123</td>
<td>Alternating Current Electrical Theory I</td>
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<td>WTT-103</td>
<td>Introduction to Wind Energy</td>
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<td>CSC-110</td>
<td>Intro to Computers</td>
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<tr>
<td>MAT-102</td>
<td>Intermediate Algebra</td>
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<td>BUS-161</td>
<td>Human Relations</td>
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<td>WTT-244</td>
<td>Alternating Current Electrical Theory II</td>
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<td>WTT-133</td>
<td>Wind Turbine Mechanical Systems</td>
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<td>WTT-126</td>
<td>Basic Hydraulics</td>
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<td>Electric Motors and Generators</td>
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<td>WTT-201</td>
<td>Wind Turbine Site Construction &amp; Locations</td>
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# Certificate Programs

The certificates listed below are designed to enhance existing degrees. These certificates may not provide an individual without prior education with all the course work necessary for entry into their desired career field. For more information please contact the program advisor.

## Sustainable Energy

**Certificate**  
*Location: Estherville Campus*

**Required Courses Credits**

<table>
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<td>SER-101</td>
<td>Intro to Sustainable Energy Resources</td>
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<td>EVS-203</td>
<td>Environmental Seminar I</td>
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<td>EVS-124</td>
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<td>SER-111</td>
<td>Intro to Wind Energy Resources</td>
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<td>Environmental Seminar II</td>
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<td>EVS-941</td>
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<td>Intro to Biomass Energy Resources</td>
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<td>SER-201</td>
<td>Sustainable Energy Resources Management</td>
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## Computer Forensics

**Certificate**  
*Location: Estherville Campus*

**Required Courses Credits**

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<td>Basic Networking/Comp Tech (3cr.)</td>
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<td>NET-122</td>
<td>Computer Hardware Basics (3 cr.)</td>
<td>AND</td>
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<tr>
<td>NET-140</td>
<td>Networking Essentials (4cr.)</td>
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<tr>
<td>CRJ-172</td>
<td>Introduction to Digital Forensics</td>
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<td>CRJ-173</td>
<td>Intermediate Digital Forensics</td>
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<tr>
<td>CRJ-170</td>
<td>Overview of Cybercrime</td>
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## Limited Radiology

**Certificate**  
*Location: Spencer Campus*

**Required Courses Credits**

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<td>HSC-217</td>
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<td>MAP-253</td>
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<td>MAP-254</td>
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## Biorenewable Fuels Technology

**Certificate**  
*Location: Emmetsburg Campus*

**Required Courses Credits**

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<td>Introduction to Bioscience Technology</td>
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<td>BPT-201</td>
<td>Plant Process and Design</td>
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<td>COM-725</td>
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<td>CSC-110</td>
<td>Introduction to Computers</td>
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## Digital Forensics

**Certificate**  
*Location: Estherville Campus*

**Required Courses Credits**

<table>
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<th>Course Title</th>
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<td>Computer Hardware Basics</td>
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</tr>
<tr>
<td>NET-140</td>
<td>Networking Essentials</td>
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<td>CRJ-172</td>
<td>Introduction to Digital Forensics</td>
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</table>
The Iowa community colleges have a common course numbering system for all credit courses offered by Iowa community colleges. The numbering system facilitates transfer and articulation processes for Iowa community college students.

<table>
<thead>
<tr>
<th>A B C</th>
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<tbody>
<tr>
<td>Discipline prefix of program or subject</td>
<td>000-099 developmental courses</td>
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<tr>
<td></td>
<td>100-899 courses intended to meet specific requirements for certificates, diplomas, and degrees in career and technical and transfer programs</td>
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<tr>
<td></td>
<td>900-999 generic focus courses such as special topics, OJT, internships</td>
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**Key to Course Prefixes**

<table>
<thead>
<tr>
<th>ACC</th>
<th>Accounting</th>
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<tbody>
<tr>
<td>ADM</td>
<td>Administrative Assistant</td>
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<tr>
<td>ADN</td>
<td>Associate Degree Nursing</td>
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<tr>
<td>AGA</td>
<td>Agriculture-Agronomy</td>
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<tr>
<td>AGB</td>
<td>Agriculture-Farm Management</td>
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<td>Agriculture-Mechanics</td>
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<td>Agriculture-Precision Ag</td>
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<td>Agriculture-Animal Science</td>
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<td>Aviation</td>
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<td>Business Computer Applications</td>
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<td>Parts Dist. &amp; Inv. Control</td>
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<td>Physical Education Activities</td>
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<td>PEH</td>
<td>General Phys Ed and Health</td>
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<td>Physical Education Training</td>
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<td>Reading</td>
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<td>REC</td>
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| REL  | Religion |
| SCI  | Science |
| SCS  | Sign Communication Skills |
| SDV  | Student Development |
| SER  | Sustainable Energy Resources |
| SOC  | Sociology |
| SPC  | Speech |
| SUR  | Surgical Technology |
| WEL  | Welding |
| WTT  | Wind Energy & Turbine Tech |
**Course Descriptions**

### Accounting

**ACC-111 Intro to Accounting, 3 cr.**
Introduces the basic principles of accounting and the recording of simple business transactions using the double entry system. Includes the accounting procedures of journalizing transactions, posting to the ledger, making a trial balance, creating receipt and disbursement of cash.

**ACC-131 Principles of Accounting I, 4 cr.**
Accounting methods, principles and terminology needed in the preparation and understanding of the financial statements of a business enterprise. Includes a study of partnership accounting.

**ACC-132 Principles of Accounting II, 4 cr.**

**ACC-161 Payroll Accounting, 3 cr.**
A study of payroll records and payroll taxes imposed by state and federal agencies.

**ACC-221 Cost Accounting, 3 cr.**
Develops an understanding of accounting methods for manufacturing and service enterprises including analysis techniques for management. Prerequisite: ACC-132

**ACC-231 Intermediate Accounting I, 4 cr.**
Reviews accounting procedures and reporting processes, including an in-depth analysis of generally applied accounting principles. Topics include the income statement, balance sheet, revenue recognition, cash and marketable securities, and notes and accounts receivable. Prerequisite: ACC-132

**ACC-232 Intermediate Accounting II, 4 cr.**
Continuation of ACC-231, including in-depth analysis of generally accepted accounting principles pertaining to liabilities, equities, revenues and expenses. Prerequisite: ACC-231

**ACC-261 Income Tax Accounting, 3 cr.**
Introduces the general theory and procedures pertaining to state and federal taxation. Studies application of laws as they pertain to income of individuals and sole proprietorships, gifts, estates and Social Security.

**ACC-310 Computer Accounting, 2 cr.**
Provides students with a basic understanding of the accounting cycle on microcomputers. Topics include ledgers, accounts receivable and payable, payroll, inventory and depreciation. An integrated accounting software package is introduced.

**ACC-311 Computer Accounting, 3 cr.**
Studies payroll records and payroll taxes imposed by state and federal agencies. The course will focus on computerized accounting records, including general ledger, accounts receivable, accounts payable, depreciation and payroll systems.

**ACC-929 Individual Projects, 2 cr.**
Provides experience in the application of accounting principles to a simulated retail business.

**ACC-941 Practicum, 3 cr.**
On-the-job training experience provides the student with the opportunity to apply accounting concepts and procedures in a work situation and the opportunity to develop proper work attitudes.

### Administrative Assistant

**ADM-106 Intro to Keyboarding, 2 cr.**
Teaches the basic computer keyboard using the touch method to develop speed and accuracy.

**ADM-116 Keyboarding II, 3 cr.**
Tabulations, letters, reports and other production work for students with previous instruction in keyboarding, but with insufficient skill to qualify for the next course.

**ADM-132 Bus Math & Calculators, 2 cr.**
Provides skills and competencies in basic mathematical functions and in the operation of electronic calculators. Emphasis is on solving business problems and in developing speed and accuracy.

**ADM-142 Desktop Publishing, 3 cr.**
Using WordPerfect or other word processing software on microcomputers to learn creating, retrieving, saving, editing, sorting, and printing documents. Various features of the program such as merging, macros, sorting, columns, tables, graphics and desktop publishing are covered.

**ADM-162 Office Procedures, 3 cr.**
Includes modern office skills and technologies, including word processing, automation, records management, reprographics, communication services, time management and methods of handling stress, meeting and travel arrangements and career advancement.

**ADM-220 Career Development Skills, 1 cr.**
Teaches necessary attitudes and behaviors needed in the business world.

**ADM-254 Business Professionalism, 0-1 cr.**
Introduction to Business Professionals of America activities, which includes preparation for state and national competitive events, leadership and professional development.

**ADM-255 Business Professionalism II, 0-1 cr.**
Business Professionals of America prepares the student for their chosen profession by assisting them in their leadership and professional development for the workplace. Continuation of ADM-254.

**ADM-354 Business Professionalism III, 0-1 cr.**
Continuation of ADM-255.
ADN-355 Business Professionalism IV, 0-1 cr.
Continuation of ADM-354.

ADN-936 Occupational Experience, 5 cr.
Apprenticeship in office systems. Students work as regular employees in offices supervised by staff members. This work experience is introductory to meet the student’s abilities and career objectives.

ADN-941 Practicum, 5 cr.
Practical field experience arranged to include office work, direct leadership, and procedures related to career work. Prerequisite: Permission of the instructor.

Associate Degree Nursing

ADN-401 Nursing Interventions in Maternal/Child Hlth, 6 cr.
This course is designed to assist a student to develop skills in implementing a plan of care for maternity and pediatric clients utilizing the nursing process and standardized nursing language. The role of the registered nurse in health education and anticipatory guidance will be stressed. Experiences in acute care and community based settings will be utilized to strengthen assessment, planning, implementation and communication skills in the care of childbearing and childrearing families.

ADN-402 Nrsg Interventions in Maternal/Child Hlth Cl, 2 cr.
This course is designed to assist a student to develop skills in implementing a plan of care for maternity and pediatric clients utilizing the nursing process and standardized nursing language. The role of the registered nurse in health education and anticipatory guidance will be stressed. Experiences in acute care and community based settings will be utilized to strengthen assessment, planning, implementation and communication skills in the care of childbearing and childrearing families.

ADN-407 Nursing Interventions in Adult Health I Cl, 2 cr.
This course prepares the student for entry level professional practice focusing on the care of adults of all ages and cultures experiencing alterations in health. Emphasis is on alterations in cardiovascular, renal/urinary, gastrointestinal, neurological, musculoskeletal, reproductive, and sensory/integumentary functions. The nursing process, nursing diagnoses, and the Nursing Interventions Classification system guide the student in the care of clients with increasingly complex conditions. This course prepares the student for entry level professional practice including management, delegation and job seeking skills.

ADN-506 Nursing Interventions in Adult Health II Cl, 8 cr.
This course is the second of a two course sequence which focuses on the care of adults of all ages and cultures experiencing alterations in health. Emphasis is on alterations in cardiovascular, renal/urinary, gastrointestinal, neurological, musculoskeletal, reproductive, and sensory/integumentary functions. The nursing process, nursing diagnoses, and the Nursing Interventions Classification system guide the student in the care of clients with increasingly complex conditions.

Agriculture-Agronomy

AGA-112 Agronomy, 2 cr.
Introduction to the principles of farm crop production, including classification, growth and management of specific commonly grown Midwest crops.

AGA-113 Advanced Agronomy, 2 cr.
Studies crop management problems in corn, soybeans, oats, forages and other crops in northwest Iowa, with emphasis on crop diseases, insect problems, crop production practices, and marketing.

AGA-114 Principles of Agronomy, 3 cr.
Covers the basic principles of crop production, including classification, soil-plant interrelationships and growth process in response to environment.

AGA-131 Plant Physiology, 2 cr.
Course acquaints students with the activities of a complex plant during growth and reproduction and furthers the understanding of how these activities affect the normal production practices – planting, spraying, fertilizing, harvesting, etc.

AGA-154 Fundamentals of Soil Science, 3 cr.
An introduction to basic soil formation, classification, physical properties, water, organic matter, pH, and fertility. Prerequisite: CHM-151

AGA-156 Introduction to Soils, 3 cr.
Introduction to basic soil formation, soil component parts, classification, soil productivity characteristics, soil sampling, soil test interpretation, soil management and soil amendments.
AGA-160 Agronomy - Nutrient Management, 2 cr.
Builds on the introductory soil fertility course and includes grid sampling sizes, plant nutrient analysis, CEC, base saturation and nutrient management planning.

AGA-166 Agronomic Applications, 3 cr.
Introduction to the study of plant structure, identification. Tillage and planting practices will also be explored and practiced. Crop scouting for crop pests and disease is explored in the lab component.

AGA-218 Grain Harvest Hdlg Drying Equipment, 2 cr.
Course designed to give theoretical knowledge and practical experience in the operation of a combine, grain drying and grain storing equipment.

AGA-219 Planting & Seeding Seminar/Lab, 1 cr.
This course offers opportunities for participants to develop plans for spring planting operations as well as participate in equipment evaluation, maintenance and calibration. Spring planting includes seedbed preparation, seed genetics/herbicide combinations, refuge planting, mapping of fields on paper as well as with the use of GPS systems. Students will set and operate a planter at the Iowa Lakes Farm Lab and then evaluate the results such as planting depth, seed spacing, planted population and the quality of the GPS map which they plotted as planter operations took place. Evaluation of soil conditions and compaction zones from maps and hands on testing equipment will also be part of the lab component.

AGA-283 Pesticide Application Cert, 2 cr.
Preparation for the student to pass the state of Iowa Custom Applicators Core Manual examination. Includes safe use and handling of pesticides.

AGA-284 Agricultural Chemicals II, 3 cr.
Studies herbicide, insecticide and fumigation categories.

AGA-352 Intro Fertilizer Technology, 2 cr.
Studies soil fertilization, with emphasis on fertilizer material and applications, blending, soil test recommendations and handling in meeting crop needs.

AGA-353 Advanced Soil Fertility, 2 cr.
Course teaches the understanding of the manufacture of fertilizer, physical and chemical characteristics, materials and handling, and new technologies in application of fertilizers, including equipment and materials.

AGA-374 Pest Identification, 1 cr.
Collection and identification of weed and insect pests affecting corn and soybeans.

AGA-375 Integrated Crop Management, 2 cr.
Assists the student in developing the concepts of integrated pest management as they relate to cultural, mechanical, chemical and biological controls.

AGA-840 Agronomy Lab, 1 cr.
An individualized course for students wishing to develop a more in-depth or specialized study of agronomic information. Students will complete 19 CCA (Certified Crop Advisor) units and review other significant agronomic references in preparation for the Certified Crop Advisor Exam.

Agriculture-Farm Management

AGB-101 Ag Economics & Management, 3 cr.

AGB-109 Intro to Human Relations, 2 cr.
Course designed to help the students understand themselves and their potential customers, includes employer-employee relationships, human relations in agribusiness and fundamentals of advertising.

AGB-110 Human Relations I, 2 cr.
Introduction to topics which relate to beginning farming in a family farm environment. Topics include personality, family relationships, decision making and social relations as they apply to everyday living and working in an on-going family operation.

AGB-194 Beginning Sales, 2 cr.
Basic selling techniques, with emphasis on retail selling, role playing in sales situations and video playback critique.

AGB-210 Agricultural Law, 2 cr.
Introduction to business law which interprets the rights and social forces of business, society, government and contracts.

AGB-281 Computerized Agricultural Accounting, 1 cr.
Preparation for using a versatile computerized farm accounting system.

AGB-301 Computerized Agricultural Accounting, 1 cr.
Covers the theory of double entry accounting, including the use of journals, ledgers, balance sheets and profit and loss statements.

AGB-307 Begin Accounting, 2 cr.
An individualized lab for students concurrently enrolled in AGB-309. Students explore programs for their own farm operations using software programs for machinery replacement strategies and the integrated crop management database.

AGB-309 Farm Machinery Mgmt, 2 cr.
Fitting power and machinery needs to specific farming operations to obtain efficiency through various analysis methods for decision-making.

AGB-327 Principles of Farm Business Management, 2 cr.
Current principles and practices of farm management. Production enterprise budgets, partial budgets and cash flow budgets are explored.

AGB-339 Intro to Ad Layout, 1 cr.
The opportunity of students to define, understand and actually make advertising layouts.

AGB-340 Advertising, 1 cr.
Introduction to advertising as well as an understanding of the use of the various media.

AGB-343 Office Procedure, 2 cr.
Course is designed to outline business procedures necessary to operate an agribusiness: sales receipts, bank drafts and other business forms.
AGB-435  Intro to Grain/Commodity Mktg, 3 cr.
Introduces the basic elements of cash grain marketing and then introduces futures markets.

AGB-436  Grain Merchandising, 2 cr.
Studies livestock and grain futures marketing methods including product quality, methods and options.

AGB-437  Commodity Marketing, 3 cr.
Introduction to the commodity futures markets, with information on contract specifications, exchanges, basic trading information, and fundamental and technical market information.

AGB-438  Ag Futures & Future Options, 2 cr.
This course is designed to build on the Intro to Marketing course and will cover topics to include, basis, merchandising, grain settlements, daily position reports, and hedging.

AGB-439  Commodity Marketing Lab, 1 cr.
Strategies to increase proficiency in commodity and option marketing. Includes knowledge needed to sit for the Series 3 National Futures Examination. Prerequisites: AGB-437 and AGB-438.

AGB-466  Agricultural Finance, 3 cr.
Studies the sources and uses of farm credit to maximize farm income. Balance sheets, income statements and cost of financing options are a critical component of this class.

AGC-102  Computers in Agriculture, 2 cr.
This course includes basic knowledge of computer hardware and operation. Software applications include word processing, spreadsheets, powerpoint presentations, internet, and email.

AGC-104  Applied Computers in Agriculture, 2 cr.
A computer class designed to teach Spreadsheet, Database, and Desktop Publishing Skills. Continuation of AGC-106.

AGC-106  Intro to Computers, 1 cr.
Introduction to computers and their application to agriculture. The course includes computer literacy and operation, word processing and an introduction to spreadsheets.

AGC-109  Advanced Computer Spreadsheets, 2 cr.
Spreadsheet applications for agriculture, using software such as Microsoft Excel. Included are lessons on spreadsheet operation and spreadsheet development.

AGC-111  Basic First Aid/Life Support, 1 cr.
Teaches American Red Cross basic first aid and American Heart Association cardiopulmonary resuscitation (CPR).

AGC-200  Career Seminar, 1 cr.
Student observes an agribusiness operation without pay.

AGC-210  Employment Seminar, 1 cr.
Preparation of the farm management student for entry into the non-family farm job market.

AGC-215  Career Seminar, 2 cr.
Course covers types of insurance, family and business budgeting, and farm organizations.

AGC-316  Field Studies-Agribusiness, 1 cr.
Course is designed to take students on field trips to colleges, industries and agricultural businesses.

AGC-317  Agricultural Field Studies, 1 cr.
Studies the application of crop production and animal science production practices through field studies trips. Study trips will involve research farms, industry field days, extension field days and area farms.

AGC-850  Employ Exp I-Agribusiness, 3 cr.
A full-time, on-the-job, hands-on work experience in the area of agribusiness.

AGC-851  Employment Exp II-Agribusiness, 5 cr.
Continuation of AGC-850.

AGC-852  Employment Exp III-Agribusiness, 5 cr.
Continuation of AGC-851.

AGC-853  Employment Exp IV-Agribusiness, 2 cr.
Continuation of AGC-852.

AGC-854  Employment Exp I-Ag Production Tech, 3 cr.
The first of four on-the-job training experiences in the farm management curriculum. Students gain hands-on experiences to back up technologies studied in the classroom.

AGC-855  Employment Exp II-Ag Production Tech, 3 cr.
Continuation of AGC-854.

AGC-856  Employment Exp III-Ag Production Tech, 3 cr.
Continuation of AGC-855.

AGC-857  Employment Exp IV-Ag Production Tech, 3 cr.
Continuation of AGC-856.

AGC-858  Employment Exp IV-Ag Production Tech, 3 cr.
Continuation of AGC-857.

AGC-928  Independent Study - Agriculture, 1 cr.
Independent study or a special project in agriculture.

AGH-106  Introduction to Horticulture, 3 cr.
This course introduces students to basic horticulture. Includes plant anatomy and physiology, plant classification and identification, and basic plant care.

AGH-113  Turfgrass Management, 3 cr.
Students will learn the basics about the turfgrass industry, different varieties of grasses and the care to maintain a healthy, attractive looking lawn.

AGH-117  Weed Identification, 2 cr.
Introduces the students to identification and collecting of weeds in turfgrass, nurseries, parks, and greenhouses. Students will learn the different life cycles of weeds and proper timing to control them.

AGH-126  Woody Plant Material, 4 cr.
Teaches students the various trees and evergreens hardy to Zone 4. Emphasis will be placed on Latin names and identification techniques of the plant material commonly used in the horticulture and landscaping industry.
AGH-128  Plant Material II, 4 cr.
Students will know the identification, characteristics, and growing of annuals and shrubs. Emphasis will be placed on Latin names and identification techniques of the plant material commonly used in the horticulture and landscaping industry.

AGH-129  Plant Material III, 3 cr.
Introduces the students to the various perennials. Emphasis will be placed on Latin and common names and identification techniques of the plant material commonly used in horticulture and landscape usages.

AGH-141  Equipment Operations, 3 cr.
Students will learn proper care and maintenance of the college grounds by using appropriate horticulture practices. Students will be introduced to specialized equipment, operation, preventative maintenance, daily and minor repairs.

AGH-151  Landscape Design Techniques, 2 cr.
Learn to apply the principles of design taught in Residential Landscape Design I and allow the students to continue the hands-on practice of designing.

AGH-153  Residential Landscape Design, 2 cr.
Teaches the basic principles and skills of designation a landscape by using the proper plants, hardscapes, scales, balance, and many other principles to complete and sell a landscape design.

AGH-160  Landscape Installation and Maintenance II, 1 cr.
Continuation of landscape installation and maintenance practices. Gives students hands on application of landscape installation and maintenance.

AGH-165  Irrigation Install & Repair, 2 cr.
Familiarize the students with the basics of the irrigation system and the components involved.

AGH-256  Horticulture Chemicals, 1 cr.
Certification training in pest identification, control methods, pesticides and laws of the categories of ornamental and turf for a commercial applicators license. Prepare students to pass the core test and categories.

AGH-405  Golf Course Maintenance, 3 cr.
Introduction of turfgrass management techniques utilized in the operation of a golf course. The various components studied include tee boxes, fairways, rough, greens and bunkers. Students learn how golf courses are managed in theory and practice.

AGH-850  Occupational Experience I, 4 cr.
Closely supervised period of on-the-job training in a business related to horticulture.

AGH-860  Horticulture Careers/Horticulture Fields Trip, 2 cr.
Introduces the students to various careers available within the horticulture fields through speakers from different occupations and by touring different businesses in the industry.

Agriculture-Mechanics

AGM-102  Farm Equipment Maintenance, 1 cr.
Basic machinery maintenance and adjustment of equipment used in agricultural business.

AGM-114  Hydraulics I, 2 cr.
A study of hydraulic components, including troubleshooting, removal, repair and replacement.

AGM-115  Hydraulic Components Lab, 3 cr.

AGM-116  Fundamentals of Hydraulic, 3 cr.
Basic hydraulic laws and principles as they apply to the farm equipment mechanics repair industry, how basic components work.

AGM-117  Fundamentals of Hydraulic Lab, 2 cr.
Using hydraulic test equipment, working at the test bench and testing hydraulics on tractors. Co-requisite: AGM-117.

AGM-161  Ag Construction, 1 cr.
General farm construction including concrete work, fencing, building fabrication and remodeling, electrical wiring and plumbing for water and gas.

AGM-203  Ag Welding, 2 cr.
Introduction to electric, gas, wire and oxy-acetylene welding.

AGM-300  Fundamentals of Electricity, 3 cr.
Basic laws and principles of electricity as they apply to the farm equipment repair industry, how basic components work.

AGM-301  Fundamentals of Electricity Lab, 2 cr.
Application of electrical laws and principles in checking electrical systems on selected farm equipment using electrical test equipment. Co-requisite: AGM-301.

AGM-302  Electrical Components, 2 cr.
Study of selected farm equipment electrical components and how to troubleshoot, repair or remove, and replace them.

AGM-303  Electrical Components Lab, 3 cr.

AGM-411  Engine Repair, 6 cr.
Fundamentals of engine overhaul with the emphasis on diesel and gasoline engines.

AGM-413  Diesel Engine Overhaul, 5 cr.
Continuation of AGM-204 including design and operation of diesel engines as well as rebuilding and troubleshooting procedures. Lecture and laboratory.

AGM-415  Farm Equip Air Conditioning, 4 cr.
Theory, diagnosis and service of the complete air conditioning system as applied to farm equipment. Lecture and laboratory.

AGM-416  Combine & Implement Repair & Adjustment, 4 cr.
Assembly, maintenance and adjustment of harvesting, planting, tillage and spraying equipment. Lecture and laboratory.

AGM-420  Fuel Systems, 2 cr.
Study of technical principles and their application to fuel injection systems and turbos, including diagnostics, adjustments and overhaul procedures. Co-requisite: AGM-421.
AGM-421 Fuel Systems Laboratory, 3 cr.
Application of technical principles to fuel systems and turbos, including diagnosis, adjustments and overhaul procedures. Co-requisite: concurrent registration in AGM-420.

AGM-430 Differentials and Final Drives, 6 cr.
Technical principles and their application to drive shafts, universal joints, differentials, differential locks, final drives and PTO's, including diagnosis, repair, adjustment and overhaul procedures.

AGM-431 Transmissions, 7 cr.
Technical principles and their application to transmissions and clutches, including diagnosis, repair, adjustment and overhaul procedures.

AGM-850 Dealership Experience, 2 cr.
A four week block of time in which each student works as a regular mechanic in a farm implement related dealership.

AGP-242 Precision Ag Applications, 2 cr.
Studies the basic principles of business, including a brief overview of some economic principles and methods of doing business.

AGP-329 Intro to GPS, 3 cr.
An introduction to the use of GPS and VRT as it impacts agricultural producers. Students will use field mapping software and GPS systems as part of the class.

AGP-450 Fundamentals of GIS, 3 cr.
ArcView on Windows-based computers is used to introduce GIS concepts and potential applications. GIS data collection, connectivity, management and presentation techniques are offered in lecture-laboratory format.

AGS-113 Survey of the Animal Industry, 3 cr.
This course is an introduction in animal science including various species and breeds of domestic animals and gives them an appreciation for the principles of production, biological principles, stewardship, and animal industries as they relate to animal production in the U.S. and the world.

AGS-114 Survey of the Animal Industry, 2 cr.
Introduction to the basics of livestock and poultry production.

AGS-117 Animal Science, 2 cr.
Course offers beef, swine, dairy and sheep management.

AGS-240 Animal Health, 2 cr.
Animal environment and adaptation, animal health and animal behavior as it relates to production and non-production species.

AGS-242 Animal Health, 3 cr.
Provides information about the cause, nature, prevention, and treatment of the common health problems of farm animals. Identifies animal behavior and develops a herd health program.

AGS-317 Animal Nutrition, 2 cr.
Teaches basic nutrition and ration balancing for animals.

AGS-319 Animal Nutrition, 3 cr.
Nutritional principles, digestive systems, composition and nutritional characteristics of common feedstuffs, ration formulation and recommended feeding programs for farm animals. Prerequisites: AGS-113 and CHM-112 or permission of instructor.

AGS-350 Artificial Insemination of Cattle, 1 cr.
To provide students with hands on skills in artificial insemination in beef cows.

AGS-400 Swine Production I, 2 cr.
A study of various aspects of swine production followed by in-depth units on farrowing management and production skills and techniques.

AGS-510 Swine Confinement Systems, 2 cr.
Course deals with swine management concerns in confinement operations.

AGS-511 Advanced Swine Confinement Mgt, 2 cr.
Basic introduction to swine confinement systems and management, including operation of equipment, ventilation systems and record keeping.

AGS-520 Swine Records & Analysis, 3 cr.
Feeding, nutrition, diseases, marketing and economic principles of swine production.

AGS-522 Swine Grower/Finisher Management, 2 cr.
Basic swine production skills and theory including nutrition, feeding, feed budgeting and feed handling, and general swine management practices to achieve successful grower-finisher and wean-to-finish management.

AGS-529 Swine Reproduction & Mgmt, 2 cr.
Provides an in-depth background for utilizing basic swine management principles.

AGS-556 Intro to Beef Cow Production, 2 cr.
Includes management, nutrition and breeding practices in a beef cow operation through classroom and practical experience.

AGS-557 Advanced Beef Cow Production, 2 cr.
Management of the beef cow herd with concentration on breed identification, reproduction, genetics, selection, calving management and record keeping systems.

AGS-558 Grazing Systems & Forage Mgmt, 2 cr.
Classroom and farm lab instruction covering establishment, management, economics and nutritional value of forage systems for ruminant animals.

AGS-559 Beef Feedlot Production, 2 cr.
Studies the buying, selling, nutrition, health and management of a beef feed lot operation.

AGS-561 Adv Beef Production, 2 cr.
Continuation of AGS-556.

AGS-562 Farm Enterprise Beef Feedlot, 1 cr.
A hands on lab were students gain skills in feeding management of beef enterprises.
AGS-563  Farm Enterprise Experience/Cow-Calf, 1 cr.
A hands on lab were students gain hands on skills in beef cow and calf management.

AGS-564  Farm Enterprise Forage Management, 1 cr.
A hands on lab were students gain skills in pasture management practices involving MIG (Managed Intensive Grazing) and silage harvesting practices.

AGS-565  Farm Enterprise Swine Tech, 1 cr.
A hands on lab were students gain skills in basic production practices needed in the swine life cycle. (Breeding, farrowing, nursery and finishing)

AGS-566  Farm Enterprise Swine Management, 1 cr.
A hands on lab were students gain skills needed to effectively manage Technician level employees. Also includes production record data input, records analysis and development of work lists to manage the swine operation.

Anthropology

ANT-100  Introduction to Anthropology, 3 cr.
In this course we will work to make true statements about all human beings who have ever lived, all human beings who live today, and all human beings who will ever live, even to the point of not being human. This will be an introductory survey of the field of Cultural Anthropology from the cultural materialist theoretical perspective.

ANT-105  Cultural Anthropology, 3 cr.
Introduction to the comparative study of culture and social organization from the anthropological point of view.

Art

ART-101  Art Appreciation, 3 cr.
Introduces art as a visual language, along with the methods and materials used. A brief art survey is also included, with the intent of helping the student become more informed about the visual arts.

ART-110  Contemporary Art and Issues, 3 cr.
Contemporary Art and Issues is a history of visual arts course from 1940 to the present. Lives, careers, achievements and controversies of artists and the art world will be investigated. Special attention will be given to women in the arts and multiculturalism in the arts. Discussion of current and possible future trends will also be covered.

ART-121  2-D Design, 4 cr.
The fundamentals needed to build effective two- and three-dimensional designs. The plastic elements of art along with the principles of organization will be introduced through a variety of hands-on experiences.

ART-124  Computer Art, 3 cr.
A studio-oriented course designed to use the computer as a tool for creating two-dimensional imagery. Technology is now used daily in the world of art including fine arts, graphic arts, and more. Ideally, the student should have access to the all or some of the following programs and peripherals: Microsoft Word, Microsoft Paint, a digital camera or scanner. Other items that could be utilized: Adobe Photoshop, Adobe PageMaker, Adobe Illustrator, printer, and other software appropriate for art and graphic design. In addition, the student should feel comfortable sending images and files via email and the internet.

ART-127  Digital Illustration, 3 cr.
Introductory course using electronic media as applied to specific problems in illustration, with an emphasis on preparing images for output.

ART-133  Drawing, 3 cr.
For the beginning drawing student. A variety of approaches and techniques will be used to develop and/or enhance the student's drawing skills. Exploration and experimentation with alternative drawing materials and methods will be strongly encouraged and supported.

ART-134  Drawing II, 3 cr.
Continuation and elaboration of ART-133. Prerequisite: ART-133.

ART-143  Painting, 3 cr.
The fundamentals of painting. A variety of painting media will be used, including oil, watercolor and acrylic. Diverse subject matter and approaches to painting will also be explored.

ART-144  Painting II, 3 cr.
Continuation of ART-143 with emphasis on a more personal approach regarding technique and imagery. Prerequisite: ART-143.

ART-173  Ceramics, 3 cr.
A studio class providing exploratory experiences in forming, firing, and decorating clay.

ART-174  Ceramics II, 3 cr.
Continuation of Ceramics I with an emphasis on the development of a personal approach to form. Prerequisite: ART-173.

ART-206  Art History, 3 cr.
In-depth study of how art relates to a timeline, studying art in chronological order from ancient Greece to the present. Explores the connection between great works and the environments that stimulated their creation.

ART-286  Photography: Portraiture, 3 cr.
Introduction to the art of portrait photography.

ART-928  Independent Study, 1 cr.
Instructor guided independent experiences in art.

American Sign Language

ASL-101  Intro to Am Sign Language & Deaf Cult. I, 2 cr.
An introductory level sign language course in American Sign Language, which is different from signed English. ASL has its own syntax and sentence structure. Deaf culture is explored as it relates to communication.

ASL-102  Intro to Am Sign Language & Deaf Cult. II, 2 cr.
A continuation of ASL-101 adding to the students vocabulary and proficiency.

Automotive Technology

AUT-105  Intro to Automotive Technology, 4 cr.
Basic theory and correct procedures for servicing vehicles provide the student with the skills and knowledge required for routine vehicle maintenance.
Covers operation and service of power and manual steering gears, rack and pinion systems, and suspension systems; practices method of four wheel alignment checks and front-end alignment.

AUT-510 Brakes Theory, 2 cr.
The theory of operation, diagnosis, and repair procedures related to the modern automotive braking system. Areas of instruction will include: mechanical, hydraulic, and electrical subsystems.

AUT-512 Auto Brake Systems Theory, 5 cr.
Basic principles of brakes, the hydraulic system, disc and drum brakes, parking brakes and power assist units. Emphasis on operation, diagnosis and repair of various braking systems.

AUT-513 Auto Brake Systems Lab, 4 cr.
A lab experience which will allow the student to acquire competencies in brake diagnosis and repair procedures.

AUT-522 Auto Electrical Systems Lab, 3 cr.
Hands-on class in the operation, construction and repair of alternators, starters and electrical components as they apply to the safety and driver convenience.

AUT-523 Automotive Electrical Systems Theory, 4 cr.
Electrical theory, diagnosis and repair procedures as they pertain to the automotive charging, starting and power accessory systems.

AUT-524 Automotive Elect Systems Lab, 5 cr.
A lab experience that will provide the student with the opportunity to perform diagnosis, repair, and adjustment of automotive chassis electrical systems. Skills acquired in previous labs may be reviewed.

AUT-530 Automotive Electrical Systems, 5 cr.
Basic electricity as it pertains to the automotive chassis electrical systems. The operation, construction, and repair of charging and starting systems will be covered. Electrical components as they apply to the safety and driver convenience systems of the auto will be studied and service repair procedures investigated.

AUT-703 Automotive Heating & Air Conditioning, 3 cr.
The theory of operation, diagnosis and repair of automotive air conditioning and heating systems. Lab experience will provide the student with the opportunity to acquire the competencies required for successful automotive air conditioning and heater maintenance.

AUT-704 Auto Heating & Air Conditioning, 4 cr.
This is a study in the theory and hands-on learning activities related to operation, diagnostics and repair procedures of the modern HVAC systems used in the automotive industry.

AUT-827 Auto Ignition Systems, 4 cr.
Operation, diagnosis and repair procedures used to service the modern automotive ignition system.
AUT-834  Auto Fuel Systems, 4 cr.
Diagnostic and repair procedures used to service the automotive fuel system from the fuel tank to the fuel injector.

AUT-842  Auto Computerized Eng Controls, 4 cr.
Theory of operation, diagnosis and repair procedures for electronic engine control systems used by the automotive industry.

AUT-851  Auto Eng Performance Diagnosis, 3 cr.
Performance Diagnosis is designed to be an applied critical thinking class. By showing them techniques to gather diagnostic information through customer interviews and technical routines they have the opportunity to develop the skills necessary to formulate rapid and accurate diagnoses of automatic drivability problems.

AUT-852  Auto Eng Performance Diagnosis, 4 cr.
Diagnosis, repair and adjustment of electronic engine controls, including ignition, emission and fuel systems.

AUT-890  Automotive Technology OJT, 4 cr.
Automotive Technology OJT is designed to provide the student with the real work learning activities necessary to acquaint them with the function of the modern automotive technician and the skills demanded of them.

Aviation

AVI-105  Introduction to Aviation, 3 cr.
Introduction to Aviation provides a broad understanding of all aspects of the air transportation and aerospace industries. Lectures cover what has happened in the industry to date with emphasis on present and future developments in air transportation. The course examines the impact the airline industry is making on airports and other segments of aviation and aerospace.

AVI-110  History of Aviation, 3 cr.
History of Aviation presents historical antecedents leading to the conquest of the air and the evolution of aviation progress to the present day. The course is intended as an introductory course for those pursuing a major in aviation or considering aviation as a vocation or wanting to gain a historical perspective of the development of the field of aviation and aerospace.

AVI-129  Employ Prep Aviation Careers, 1 cr.
Teaches students how to prepare an aviation-type resume, cover letter, and how to handle an aviation job interview.

AVI-139  Private Pilot Theory, 3 cr.
Private Pilot Theory is designed to prepare those students who want to obtain a Private Pilot Certificate with the information needed to successfully complete the FAA Private Pilot Airmen Knowledge Test. This course will cover such items as the fundamentals of flight, aviation weather, airplane performance, and navigation procedures along with flight planning and human factors involved in flying an aircraft. For students not desiring flight training, this course will provide valuable insight into a mode of transportation that will be an integral part of their futures.

AVI-140  Private Pilot Ground School, 4 cr.
Ground school instruction in the fundamentals of aerodynamics, the flight environment, aircraft systems, performance charts, weight and balance, weather and navigation, which prepares the student to pass the FAA written examination.

AVI-180  Private Pilot Flight Lab I, 3 cr.
Primary flight instruction in the basics of flying, leads to earning a Private Pilot Certificate from the FAA. The student will complete a minimum of 40 flight hours. Prerequisite: Second Class FAA Medical Certificate.

AVI-212  Instrument Ground School, 4 cr.
Ground school instruction in advanced aircraft systems; commercial flight maneuvers; review of weather, aircraft performance, weight and balance, Federal Aviation Regulations and aerodynamics. Prepares students to take the FAA Commercial written test.

AVI-215  Aviation Safety, 3 cr.
This course provides the student with a detailed introduction to aspects of aviation safety as well as the associated components of flight human factors, aircraft technology, weather related accidents and accident investigation. Prerequisite: AVI-105.

AVI-220  Aviation Meteorology, 3 cr.
This three hour credit course is a study of the basic components of the earth’s atmosphere and provides a basic foundation in the meteorological and environmental factors that influence the formation of the various weather patterns found in near and upper atmospheric levels over the continental United States and the Northern Hemisphere. Included in the course will be discussion on how weather influences the basic aerodynamics of an aircraft in-flight and the basic pilot-static instrument system.

AVI-245  Commercial/Instrument Cross Ctry. Ft. Lab, 3 cr.
The student builds total flight time and increases the solo cross-country experience. In the second portion of the course initial instrument flight training is begun. Prerequisite: AVI-180 or hold a Private Pilot Certificate.

AVI-246  Commercial/Instrument Flight Lab, 3 cr.
The student develops increased instrument flying skills. At completion of the course the student should be able to earn the Instrument Commercial Pilot Certificate. Prerequisite: AVI-245 and a Private Pilot Certificate.

AVI-261  Commercial Pilot Ground School, 3 cr.
Ground school instruction in instrument procedures, preparing students to take the FAA instrument written test. Topics include instrument approach procedures, advance weather analysis, air traffic control procedures and advanced radio navigation procedures.

AVI-300  Flight Instrument Ground School, 3 cr.
Preparation for taking the FAA written examination to become a certified flight instructor and instrument flight instructor, as well as preparation for the FAA oral portion of the required flight test for these two certificates Prerequisite: Instrument/Commercial Pilot Certificate (Single Engine).

AVI-301  Instrument Instructor, 1 cr.
Prepares students to be instrument flight instructors. The student will take the FAA flight test for this certificate at completion of the course. Prerequisite: Flight Instructor and Instrument Pilot Certificates.

AVI-350  Flight Instructor Flight Lab, 3 cr.
Transition to flying from the right seat in both the basic training aircraft and the high performance single engine aircraft. At completion of the course the student takes the FAA flight test. Prerequisite: Commercial Instrument Pilot Certificate.
Business Computer Applications

BCA-134 Word Processing, 3 cr.
The essentials of word processing and the use of text-editing equipment.

BCA-152 Comprehensive Spreadsheets, 3 cr.
Provides the student with hands-on training in the use of popular spreadsheet software.

BCA-185 Beginning Web Page Development, 3 cr.
Introduces web page construction theory along with practical applications. Content includes basic terminology. HTML language and the planning and construction of the student's own web page.

BCA-212 Intro to Comp Business Apps, 3 cr.
Introduction to the field of microcomputers and their components. Includes hands-on training in the use of Windows operating system, word processing, database, spreadsheet and graphic programs. No prior computer knowledge is necessary.

BCA-217 Adv Microsoft Office Apps, 3 cr.
Intermediate and advanced software applications utilizing the most recent Microsoft Office Suite (Word, Excel, Access, and PowerPoint) to create documents, worksheets, databases, and presentations suitable for course work, professional purposes, and personal use.

BCA-701 Keyboarding Basics, 1 cr.
Use the computer program FasType for Windows to learn the basic skills of touch-typing.

BCA-702 Intermediate Microsoft Word, 1 cr.
How to use Word's publishing capabilities to create flier, newsletter, brochures and other heavily formatted documents. Online course. P/Q grading.

BCA-704 Advanced Microsoft Word, 1 cr.
How to build time-saving macros, customize toolbars, create shortcut keys, crank out form letters and mailing labels, perform queries, and more. Online course. P/Q grading.

BCA-705 Intro to Microsoft Excel, 1 cr.
Shortcuts and tricks for setting up fully formatted worksheets, techniques in writing powerful formulas, use functions, sorting and analyzing data, creating custom charts, three-dimensional workbooks, building links, creating macros and custom toolbar buttons. Online course. P/Q grading.

BCA-707 Intermediate Microsoft Excel, 1 cr.
Working faster and more productively by using Excel's features such as the PivotTable, Solver and AutoFilter. Building worksheets with decision-making capabilities and using advanced graphing techniques. Online course. P/Q grading.

BCA-708 Intro to Microsoft Access, 1 cr.
How to use a database to store, locate, print and automate access to just about any type of information. Online course. P/Q grading.

BCA-709 Intro to Microsoft Word, 1 cr.
Online course. P/Q grading.

BCA-710 Intermediate Microsoft Access, 1 cr.
How to build a fully automated database management system complete with custom data entry forms, graphics and more. Online course. P/Q grading.

BCA-711 Intro to Microsoft Powerpoint, 1 cr.
Creating slide presentations with multimedia slides, charts, outlines, graphs, clip art, hypertext links and special effects. Online course. P/Q grading.

BCA-712 Intro to PC Troubleshooting, 1 cr.
Solving system glitches, interpreting error codes and messages, detecting and eliminating conflicts, replacing drivers and performing basic preventive maintenance. Online course. P/Q grading.

BCA-718 Introduction to QuickBooks, 1 cr.
Setting up a chart of accounts; reconciling a checking account; creating and printing invoices, receipts and statements; tracking payables, inventory and receivables; creating estimates and generating reports. Online course. P/Q grading.

BCA-719 Quicken for Windows, 1 cr.
How to deal with investments, loans, recurring payments electronic transactions, budgets and more. Online course. P/Q grading.

BCA-722 Introduction to the Internet, 1 cr.
An overview of the Internet with a behind-the-scenes look at the World Wide Web, e-mail, Gopherspace, Newsgroups, FTP, chat, telephony, Telnet and more. Online course. P/Q grading.

BCA-725 WordPerfect, 1 cr.
How to use WordPerfect to create professional looking form letters, envelopes, mailing labels and spreadsheets. Also includes creating styles, tables of contents, indexes and web pages using Corel internet Publisher. Online course. P/Q grading.

BCA-728 Creating Web Pages, 1 cr.
Designing, creating and posting a site on the Internet's World Wide Web. Low-cost marketing techniques and search engine strategies are included. Online course. P/Q grading.

BCA-730 Advanced Web Pages, 1 cr.
Creating web pages incorporating tables, forms, frames, audio, scrolling text and interactive buttons, counters, cooperative banner ads, digital cash capabilities and more. Online course. P/Q grading.
BCA-731 Microsoft FrontPage, 1 cr.
Using FrontPage to easily create and upload professional looking web sites without programming. Course includes processes for selecting a web host and several low cost marketing strategies. Online course. P/Q grading.

BCA-732 Getting Organized With Outlook, 1 cr.
Using Microsoft Outlook to get the most out of e-mail communications and contact list, schedule appointments, track tasks and projects and organize information. Online course. P/Q grading.

BCA-733 Achieve Top Search Engine Positions, 1 cr.
How to increase search engine ranking for web sites; strategies to achieve a top-ten position with major search engines. Includes access to monitoring positions, marketing techniques and may include a one-year subscription to a newsletter.

BCA-734 Introduction to Windows 2000, 1 cr.

BCA-741 Basic A+ Cert: Hardware I, 1 cr.
Configuring and troubleshooting the hardware common to most personal computers. Online course. P/Q grading.

BCA-742 Intermediate A+ Cert: Operating Sys, 1 cr.
This course includes DOS; DOS memory management; Windows 3x tweaking and troubleshooting; and Windows 9x installation, optimization troubleshooting. Online course. P/Q grading.

BCA-743 Advanced A+ Cert: Hardware/Operating Sys, 1 cr.
Study of computer technologies including SCSI, video, modems, printers, multimedia, portable PC's and networking. Online course. P/Q grading.

BCA-745 CGI Programming for the Web, 1 cr.
Making a web site fun, interactive and informative with CGI. Using CGI and the Perl programming language to work with cookies and forms to build a searchable database, bulletin board and e-mail auto responder. Online course. P/Q grading.

BCA-746 Introduction to Visual Basic, 1 cr.
How to maneuver through the Visual Basic environment and use the Visual Basic language. Includes basics of window design, adding controls and user interfaces, databases and Structured Query Language (SQL); using these tools for personal applications. Online course. P/Q grading.

BCA-747 Java for the Absolute Beginner, 1 cr.
Learning the Java programming language, with practical exercises and examples. Online course; P/Q grading.

BCA-751 Microsoft Publisher, 1 cr.
The basics of Microsoft Publisher 2000, plus how to create a professional brochure, newsletter and a web site. Online course. P/Q grading.

BCA-752 Intro to Microsoft Works, 1 cr.
Creating and modifying documents with Microsoft Works software. Online course. P/Q grading.

BCA-755 Performing Payroll/QuickBooks, 1 cr.
Details the steps needed for proper setup of QuickBooks, from accessing the IRS web site to creating a new employee; tracking time and job cost data; and generating forms and reports. Online course. P/Q grading.

BCA-756 101 Tips/Tricks for Imac/Macin, 1 cr.
Tips, tricks and shortcuts in the operating system, keyboard, desktop navigation, the Internet, etc. Online course. P/Q grading.

BCA-757 Introduction to Windows XP, 1 cr.
Using a computer with Windows XP software. Online course. P/Q grading.

BCA-758 Intermediate Microsoft Works-Spreadsheet, 1 cr.
Learn how to create, modify, and format spreadsheets and charts. You will learn how to enter labels, numbers and formulas to create a basic spreadsheet. Learn how to format a spreadsheet, use AutoFill, cell references and how to fix a circular reference. You'll learn about functions to perform financial and statistical data, among other things.

BCA-761 Designing Effective Websites, 1 cr.
Graphic Design techniques to build attractive and effective web sites. Using the typography aesthetics, color graphics, page layout and the characteristics of effective web writing. Online course; P/Q grading.

BCA-762 Introduction to Flash MX, 1 cr.
Developing rich and interactive web media using Flash. Online course; P/Q grading.

BCA-763 Flash MX for Absolute Beginner, 1 cr.
Creating Flash animation, presentations and web sites. Online course; P/Q grading.

BCA-764 Intro to Adobe Acrobat 5, 1 cr.
Using Adobe Acrobat to create and use .pdf (portable document format) documents. Converting popular file types to .pdf, manipulation and formatting, collaboration and document sharing techniques, bookmarks and links, interactive forms and security. Online course; P/Q grading.

BCA-771 Introduction to SQL, 1 cr.
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. Online course; P/Q grading.

BCA-772 Introduction to Oracle, 1 cr.
Learn how to use the Oracle database management system to plan, organize, and manage your data. This course will introduce you to the Structured Query Language (SQL), Oracle's SQL*Plus, and other valuable tools used to develop, manage, and reference an Oracle database. You will learn how to create an Oracle database, build various database objects for the database, and write simple SQL statements that access the data from the database.
BIO-113 General Biology II, 4 cr.
Introduction to biology concepts with emphasis on kingdoms; taxonomy and a survey of invertebrate and vertebrate organisms; plant structures and physiology; and animal systems. Lecture and laboratory. Prerequisite: BIO-112.

BIO-141 Ecology & Environment Concepts, 4 cr.
Basic ecology and environmental concepts, including population studies of the world and how they relate to environmental problems. Lecture and laboratory.

BIO-151 Nutrition, 3 cr.
Normal Nutrition provides the student with a basic background of the nutrients which are essential in maintaining the physical and mental well-being of the human body. An overview of the digestive processes and the relationship to each group of nutrients is presented. Basic nutritional principles of food selection are studied with an emphasis on health promotion throughout the life cycle. Students examine their personal eating habits and identify ways to promote a health nutritional status.

BIO-159 Fund of Anatomy & Physiology, 3 cr.
An independent study course designed to give students background in the structure and function of the human body.

BIO-163 Essentials of Anatomy & Physiology, 4 cr.
Structure and function of the human body with emphasis on cells, tissues and all major organ systems. Anatomy and physiology are integrated at the cellular level and at the organ/system level. Lecture and laboratory.

BIO-168 Human Anatomy & Physiology I, 4 cr.
An advanced study of anatomy and physiology. The relationship between body structure and function and homeostasis forms the basis for the course. Pathological processes that result in dysfunction and disease are presented. Major topics include cell biology, histology, skin, skeletal, muscular, and nervous systems. Lecture and laboratory.

BIO-173 Human Anatomy & Physiology II, 4 cr.
An advanced study of anatomy and physiology. The relationship between body structure and function and homeostasis forms the basis for the course. Pathological processes that result in dysfunction and disease are presented. Major topics include digestive, endocrine, cardiovascular, lymphatic, respiratory, immune, blood, metabolism, reproduction, urinary, fluid, electrolyte, and acid-base balance. Lecture and laboratory.

BIO-186 Microbiology, 4 cr.
General microbiology designed for the science major and nursing students. Emphasis on morphology, physiology, microbial genetics, immunology, pathology, epidemiology, and laboratory techniques. Lecture and laboratory. Prerequisite: BIO-112 or BIO-177.

BIO-285 Projects in Biology, 1 cr.
Students develop and conduct their own research projects, work on actual research projects with biologists at the Department of Natural Resources, or research and conduct problem solving projects. Students must have instructor’s permission to enroll.

BCA-773 Intro to Perl Programming, 1 cr.
Learn Perl, a powerful and easy-to-use scripting language used on PCs, servers, and on the Internet for a wide range of programming problems. Perl is as capable and often as fast as C, C++, and Java, but is easier to learn and does not require the sort of software development tools and environments required by those languages. Perl is also more portable and supported on a greater variety of computers than many other computing languages. Perl programming skills are especially valuable for Web developers, software developers, and system administrators.

BCA-774 Creating User Requirements Doc, 1 cr.
Your success as a developer depends almost entirely on your ability to meet or exceed your customers’ every expectation. This course will show you, step by step, how to discover and document precisely what your customer wants. You will learn how to gather, manage, and document user requirements for any type of project in any industry.

BCA-785 Intro/Microsoft FrontPage 2002, 1 cr.
Creating and uploading professional looking web sites without programming. Online course; P/Q grading.

BCA-791 Intermediate PowerPoint 2002, 1 cr.
Creating exciting presentations in PowerPoint and digital media. Online course; P/Q grading.

BCA-792 The Classroom Computer, 1 cr.
Using a classroom computer to create a desire for learning in students, using simple, field-tested techniques throughout the curriculum. Online course; P/Q grading.

BCA-793 Intro to Database Development, 1 cr.
Uses a step-by-step structured approach to the phases of system development. Online course; P/Q grading.

BCA-796 Computer Skills in Workplace, 1 cr.
Learn the fundamental computer skills you need to succeed in today’s workplace. You’ll discover practical applications for email, word processors, spreadsheets, and databases, gaining a working foundation for the critical computer skills you need to survive in the modern job market.

Biology

BIO-102 Introductory Biology, 3 cr.
Introduction to all biology, ecology, physiology and biological principles. Intended for non-science majors. Lecture section of BIO-105.

BIO-105 Introductory Biology, 4 cr.
Introduction to all biology, ecology, physiology, and biological principles. Intended for non-science majors. Lecture and laboratory.

BIO-112 General Biology I, 4 cr.
Introduction to biology concepts with emphasis on ecology, cellular biology, reproduction and development, genetics and evolution. Lecture and laboratory.
BIO-248  Introduction to Bioscience Technology, 4 cr.
This course explores the expanding field of biotechnology and the impacts on society. Fundamental biology, chemistry and math concepts are applied through hands-on activities to emphasize essential laboratory methods. Course content and lab skills are relevant to agriculture, medicine, bioenergy and biosafety.

BIO-300  Field Biology & Lab, 4 cr.
Basic field study of the various types of ecosystems common to the Iowa Great Lakes region. Identification of plants and animals which inhabit these ecosystems. Specimen collection techniques, use of taxonomic keys, using water quality analysis equipment and ecological field methods. Lecture and laboratory.

Bioprocess Technology

BPT-103  Introduction to Biomass, 3 cr.
An overall view of biomass in the areas of history, developments, and growth in conversion of plant matter to energy. This course will discuss areas of interest such as energy cycles and methods, fuel cells and energy crops with an introduction into other areas of renewable energy.

BPT-106  Industry Terminology-Safety I, 3 cr.
The first of three courses, to develop a background and understanding of safety principles and requirements; to include first aid and basic OSHA (10 hour) certification.

BPT-107  Intro to Materials Management, 3 cr.
Introduction to materials Management concerning purchasing/supply concepts with inventory, distribution and operations involving these activities in an organization.

BPT-108  Plant Management, 3 cr.
A course to inform students aspects of management in industry and supervision in the work place. The topics covered are ethics in the work place, supervisory planning, labor relations, equal employment opportunity, and employee training. Also covered are Minnesota Fair Labor and Standards Acts, Minnesota Mechanical Code and Minnesota Energy Rules.

BPT-109  Industrial Equipment, 3 cr.
This course covers process plant machinery typically found in bio-refineries and its uses.

BPT-111  Instrumentation, 4 cr.
A course covering instrumentation from control loops to process control systems. Labs include process control loop training in areas of process variables, analog and discrete signals, calibration errors, flow process and measurement, and temperature and pressure measurement with classroom activities.

BPT-124  Mechanical Fund-Process Control I, 4 cr.
An introduction to plant equipment, pipes, valves, tanks, mixers, heat exchangers, distillation, pumps, motors, fans, with an emphasis on mechanical components, function and processes. Incorporated with equipment will be introduction to and applications of basic chemistry, fluid movement, heat and mass transfer. Schematics will be introduced to begin an overview of equipment interaction.

BPT-130  Water Treatment, 3 cr.
This course introduces students to the need for water treatment. The course will discuss removal of sediments and biologicals including algae, bacteria, and parasites. Methods include filtration, disinfection of water and sedimentation holding tanks.

BPT-201  Plant Process and Design, 3 cr.
A course covering ethanol production, biodiesel production and design concepts. This includes the steps involved in the typical process needed for production. Also other aspects will be covered concerning production stages.

BPT-932  Biomass Internship, 5 cr.
The on-the-job internship provides the opportunity for students to combine classroom principles, laboratory activities with on-the-job experience. The student, through the interview process with a cooperating employer, is placed in the biomass (and/or related industrial) facility that will provide a variety of beneficial and learning experiences.

Business

BUS-102  Intro to Business, 3 cr.
The basic fundamentals of business. Basic business and economic concepts and terminology; management, marketing, finance, human resource management, accounting and other business areas.

BUS-106  Employment Strategy, 2 cr.
Students are exposed to areas of retailing through field trips and interaction with people currently in the retail business. The class will involve job seeking skills and include actual job search and interviewing experience.

BUS-110  Business Math and Calculators, 3 cr.
A study of the mathematics of business in its application to a variety of vocations including fundamental mathematical processes, fractions, price and cost, interest, bank discounts, cash and trade discounts, depreciation, payroll and taxes, and financial statements. Students will acquire the skills to use Microsoft Excel to perform each concept as well as using the traditional methods.

BUS-115  Business Correspondence, 2 cr.
Emphasis on correct grammar; punctuation and spelling as applicable to written business communications, letters, memo and reports. Special notice is given to the individual student’s resume and letters of application.

BUS-121  Business Communications, 3 cr.
Communication skills necessary in the business world, including use of the telephone, interviews, job applications, listening skills and letter writing.

BUS-125  Business Principles, 2 cr.
Guidelines for starting and operating a successful business.

BUS-126  Business Principles, 3 cr.
Introduction to record keeping, financing, employee benefits and employer problems.

BUS-130  Intro to Entrepreneurship, 3 cr.
This course emphasizes these processes: understanding how to find, analyze and pursue an opportunity; understanding oneself and personality characteristics of the “entrepreneur,” examining the environment for entrepreneurship. A case and experiential approach is used.
BUS-150  E-Commerce, 3 cr.
Students are introduced 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-154  E-Business, 3 cr.
E-Business will cover the unique aspects of creating a business strategy in the E-Business environment and will focus on the internet as a medium for promotion and distribution. E-Business will discuss how traditional marketing and business arenas can be transformed in this environment.

BUS-160  Human Relations, 2 cr.
Students are given the opportunity to apply human relations concepts and evaluate experience and observations. Social skills required in various occupational settings will be developed, emphasizing how appropriate personal attitudes lead to social and business success.

BUS-161  Human Relations, 3 cr.
Students are given the opportunity to apply human relations concepts and evaluate experience and observations. Social skills required in various occupational settings will be developed, emphasizing how appropriate personal attitudes lead to social and business success.

BUS-163  Interpersonal Skills At Work, 2 cr.
Techniques for supervisors in relating to others, especially work group members. Considerations for helping supervisors develop and maintain positive and healthy work relationships.

BUS-175  Business Seminar I, 1 cr.
Introduces the Small Business Management program, career opportunities in the business world and includes an orientation to the business internship.

BUS-176  Business Seminar II, 1 cr.
Continuation of BUS-175. Presents students with job-seeking skills including resume preparation and interviewing training.

BUS-177  Business Seminar III, 1 cr.
Continuation of BUS-176.

BUS-183  Business Law, 3 cr.
Introduction to the development of law in our society — the legal rights and social forces of government, business, society and contracts. Presented under the legal framework of the Uniform Commercial Code.

BUS-186  Business Law II, 3 cr.
A continuation of BUS-183 in the area of sales, principal agent relationships, commercial paper, creditor rights, and secured transactions, real property, and bailments, as time permits.

BUS-197  Leadership Development, 3 cr.
This course explores leadership styles effective in the workplace and helps participants gain insight into their natural leadership style and implications of that style on work and group performance.

BUS-200  Time, Stress & Change Management, 3 cr.
This course provides students with the theories, tools, and resources to develop effective strategies that deal with managing time, stress, and change both personally and professionally. Focus will be placed on identifying, managing and/or solving real life situations.

BUS-210  Business Statistics, 3 cr.
Same as BUS-211.

BUS-211  Business Statistics, 4 cr.
The use of statistics by the methods of descriptive and inferential statistics. Both single and bivariate data are analyzed. Elementary probability and normal probability distributions are studied along with hypothesis testing linear correlation regression analysis and analysis of variance. Prerequisite: MAT-102 or 2 years of high school algebra.

BUS-212  Business Statistics II, 3 cr.
A continuation of BUS-211 or MAT-157. Application of statistics in a business context and use of computer software for statistics. Prerequisite: BUS-211 or MAT-157.

BUS-238  Business Problem Solving, 3 cr.
A capstone course for those students in business and computer science programs. The course will apply knowledge learned in business curriculum including accounting, management, marketing, information technology, e-commerce and office systems through the development of business strategy and implementation. Topics to be covered include development of a mission statement, value creation, SWOT analysis and strategy implementation and assessment. Students will share knowledge learned across their individual disciplines to perform case analysis, promoting critical thinking skills, teamwork and a cross-functional business environment. This course should be taken in the final semester of a student's program.

BUS-250  Principles of Real Estate, 3 cr.
Fundamental principles of real estate evaluation, brokerage, financing structure, construction and real estate law.

BUS-255  Real Estate Prelicensure, 3 cr.
This 60 hour prelicense course is required by the Iowa Real Estate Commission prior to examination for an Iowa Real Estate Salesperson license. Upon completion of this 60 hour curriculum a participant will be exposed to principles of real estate, terminology, mathematic calculations, procedures and ethics necessary to enable them to understand the real estate profession, prepare them to take the Real Estate Salesperson Examination, and to function as a well informed real estate salesperson.

BUS-259  Property/Liability Insurance Principles, 3 cr.
This introductory course addresses the fundamentals of property and liability insurance including risk, the methods of handling loss exposures, the effective use of insurance, insurance contracts, the regulation of the insurance industry, and the financial analysis of property and liability insurers. Other topics include marketing, underwriting, and claims settlement.

BUS-268  Life Insurance/Financial Planning, 3 cr.
The focus of this course is on life insurance choices and comparison, the legal framework of life insurance, premium options, and reserves. Particularly emphasis is given to the concept of utilizing life insurance as a significant cornerstone of the financial planning processes.
BUS-723 Basics of Supply Chain Mgmt, 1 cr.
Covers basic concepts in managing the complete flow of materials in a supply chain. A complete overview of material flow from internal and external supplies to and from your organization.

BUS-724 Master Planning of Resources, 1 cr.
Candidates explore processes used to develop sales and operating plans, and identify and assess internal and external demand and forecasting requirements.

BUS-725 Detailed Scheduling & Planning, 1 cr.
Explore processes used to develop sales and operations plans, and identify and assess internal and external demand and forecasting requirements.

BUS-726 Executing & Control of Operations 1 cr.
Focus on the areas of prioritizing and sequencing work, executing work plans and implementing controls, reporting activity results, and providing evaluation feedback on performance.

BUS-727 Strategic Management/Resources, 1 cr.
Explores the relationship of existing and emerging processes and technologies to manufacturing strategy and supply chain-related function. Topics include: aligning resources with the strategic plan, configuring and integrating operating process to support the strategic plan, and implementing change.

BUS-932 Practicum, 3-5 cr.
On-the-job training, usually full time, in a small business or related enterprise.

BUS-938 Office On-The-Job Training, 5 cr.
Apprenticeship in office systems. Students will work as regular employees in offices supervised by staff members.

BUS-949 Special Topics, 3 cr.
Thirty-two students total from the University of Iowa, University of Northern Iowa, Iowa State University, Buena Vista University, and Iowa Lakes Community College will participate in advanced study of entrepreneurship that will include a team-based entrepreneurial venture computer simulation, seminars with successful entrepreneurs, business and community leaders, and networking and mentoring to enhance your understanding of entrepreneurship opportunities in Iowa.

Computer Aided Drafting

CAD-111 Auto Cad I, 1 cr.
Overview of the MS-Dos environment as it relates to the operation of AutoCAD and its peripherals. Fundamental file management on a hard disk and software configuration, entity creation, editing and plotting are presented.

CAD-118 Auto Cad II, 1 cr.
Continuation of CAD111, plus introductory dimensioning, blocks, attributes, data extraction, macros, menus and AutoLISP introduction.

CAD-119 Computer Aided Drafting I, 3 cr.
An introduction to the graphic language, the equipment, the hardware, and the basic techniques used to create technical drawings. CAD workstations will be used to create basic entities and teach technical drawing techniques. Geometric construction using the CAD system will be taught.

CAD-121 Computer Aided Drafting II, 3 cr.
Instruction of technical drawing techniques will continue on CAD stations. The (3D) dimension CAD will be surveyed, but emphasis will be placed on 2D drawing communication. Creation of multiview projections, sectional views, auxiliary views, revolutions, dimensions and tolerances will be practiced.

CAD-136 Technical Design, 3 cr.
Focuses on three areas: awareness and exercise of visual design culture; an introduction to statics and strength of materials; and examination of case studies in technology decision making. Student teams will study procedures for solving problems as well as systematic design techniques.

CAD-140 Parametric Solid Modeling I, 3 cr.
Techniques for pictorial drawings based on parametric solid modeling are presented in a lecture-laboratory format. Applications of these techniques for design, working and assembly drawings in manufacturing and business environments are also presented. Mechanical graphics applications are emphasized.

CAD-141 Parametric Solid Modeling II, 3 cr.
Techniques for pictorial drawings based on parametric solid modeling are continued from CAD-140 in a lecture-laboratory format. Applications of these techniques for design, working and assembly drawings in manufacturing and business environments will also continue. Mechanical graphics applications are emphasized. More advanced features of Autodesk Inventor will be explored.

CAD-224 Descriptive Geometry, 3 cr.
To provide the student with the ability to solve three dimensional space problems by the application of graphic methods. Problems studied will include points, lines, intersections, piercing points, revolutions, developments, and intersections of surfaces. This course is designed for drafting students as well as students in pre-engineering.

CAD-230 Geometric Dimension/Tolerance, 2 cr.
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.

CAD-901 CAD Practicum, 5 cr.
On-the-job experience related to drafting or graphics with a participating business, company, or agency. Prerequisite: CAD-102.

CAD-928 CADD Projects, 2 cr.
Investigation and study of a current problem or topic in the computer aided drafting and design field. Permission of instructor required.

CAD-946 Seminar, 1 cr.
Career exploration and development of techniques for preparing resumes, seeking jobs, interviewing for jobs. Job keeping skills are included. Prerequisite: CAD-102.
Casino Management

CAS-113  Introduction to Casino Operations, 3 cr.
This course is focused on the management of Casino Operations and casino hotel operations. During this course, students will learn about the history of the gaming industry and how it is rapidly growing throughout the United States. Upon exploring this course, the students will gain and learn to apply managerial skills utilizing gaming regulations, staffing resources, marketing strategies, accounting concepts, gaming trends, casino hotel organizational structure, government regulations, consumer behavior, marketing strategies, economic impact, social and cultural concerns and the casino games.

CAS-115  Mathematical Analysis of Casino Games, 3cr.
The purpose of this course is to familiarize students with the mathematics behind each casino game on the floor that determines a specific house advantage. Probability and odds as well as the law of averages will be discussed. Game pricing techniques influencing the regulatory issues will comprise another portion of this course and finally, students will be asked to design their own slot and video poker machines based on mathematical criteria and specific hold percentages. Java-style casino games will also be utilized by students in the casino area of the course as a practice lab. This course may be offered through a distance-learning format.

CAS-120  Casino Management & Marketing, 3 cr.
The casino industry is growing rapidly worldwide and the need for proper marketing and promotion has become paramount to organizational success and profitability. Students of this course will learn about the basics of marketing including the four (4) P’s of marketing: product, price, place and promotion. Students will also familiarize themselves with the basic casino marketing plan, the goal of the slot club and related database systems, casino floor promotions, how to write personal letters to guests, casino advertising online, through print, marqueses and other media options. Finally, students will learn the basics to organizing slot and table game tournaments and game assignment. This course may be offered through a distance-learning format.

CAS-122  Gaming - Management of Table Games, 3 cr.
Casino operation requires effective skills and strategies to manage, analyze and evaluate the productivity and profitability of the table games. This course will examine the core business processes of products, pricing, people interactions, productivity, and protection and share some of the best practices currently utilized in the gaming industry. You will use information, techniques and strategies to sharpen your ability to analyze and interpret the various reports and data available to assist in making better management decisions. In addition, you will learn how to develop effective and productive marketing strategies to attract, retain and monitor your customers.

CAS-133  Casino Surveillance & Security, 3cr.
The primary function of Security and Surveillance on the casino floor is to protect the casino’s guests, employees, property and assets. This course examines both departments and their specific day-to-day functions including report writing, documentation, powers to arrest and digital recording of floor events to be stored in a video archive. Students will learn how the surveillance department uses specific cameras to cover floor space and what to watch for. This course will also address how the surveillance department protects the table games, slots area and other key operative and functional areas of the casino. The final portion of the class analyzes dealer techniques such as opening and closing procedures, dealer disputes, guest relations and “calling the game” properly. This course may be offered through a distance-learning format.

CAS-183  Player Development, 3 cr.
This course covers theoretical and practical applications for the development and retention of patrons in a gaming environment. Special emphasis will be on identifying profitable customers and creating attractive packages to develop player relationships and loyalty.

CAS-910  Gaming Internship, 1 cr., 3 cr.
The on-the-job practicum provides the opportunity for students to combine classroom principles and activities with on-the-job experience. The student, through the interview process with a cooperating employer, is placed in the gaming facility that will provide a variety of beneficial and learning experiences. The student receives a salary and/or college credits for this period of the program. The on-the-job practicum provides the opportunity for students to combine classroom principles and activities with on-the-job experience. The student, through the interview process with a cooperating employer, is placed in the gaming facility that will provide a variety of beneficial and learning experiences. The student receives a salary and/or college credits for this period of the program.

Chemistry

CHM-110  Introduction to Chemistry, 3 cr.
The lecture portion of CHM-111.

CHM-111  Intro to Chemistry I Lab, 1 cr.
Laboratory to accompany CHM-110; same as the laboratory portion of CHM-112.

CHM-148  College Chemistry II, 3 cr.
The lecture portion of CHM-152. Prerequisite: CHM-112.

CHM-149  College Chemistry II Lab, 1 cr.
Laboratory to accompany CHM-148; Same as the laboratory portion of CHM-148.

CHM-151  College Chemistry I, 4 cr.
The first of two general survey courses introducing the student to general, organic and biological chemistry. Topics covered are chemical calculations, atomic structure, nuclear chemistry, periodic relations, gas laws, solid state, solutions, and acids and bases. Lecture and laboratory.
CHM-152 College Chemistry II, 4 cr.
Continuation of CHM-151. Covers kinetics and equilibrium of chemical reactions as well as acid-base theory. Hydrocarbon naming and reactions are also covered, including alcohols, carbohydrates, amines, acids, acid derivatives, lipids, amino acids, nucleic acids and proteins, SNA, RNA and metabolism. Lecture and laboratory. Prerequisite: CHM-151.

CHM-166 General Chemistry I, 5 cr.
The properties of matter in terms of modern chemical principles. The topics covered are measurements, stoichiometry, atomic structure, chemical reactions, periodic relationships, gas laws, thermochemistry, quantum theory, solutions and equilibrium and inter-and intra-molecular forces. Problem solving in each of the areas is included. Lecture and laboratory. Prerequisite: High school chemistry and mathematics.

CHM-176 General Chemistry II, 5 cr.
Acids and bases, oxidation/reduction, solubility products, and nuclear chemistry, kinetics, equilibrium, thermodynamics, electrochemistry, coordination complexes, qualitative analysis, and an introduction to organic chemistry. Problem solving in each of the areas is included. Includes microscale and semimicroscale lab.

CHM-190 Intro to Forensic Chemistry, 4 cr.
This course covers the basics of chemistry as it relates to the forensic lab. In the course we will cover the basics of evidence collection, clues at the atomic level, the basics of chemical evidence including DNA evidence. Also covered will be the use of chemistry in explosives, arson investigations, poisoning, and estimating time of death of a victim. Lecture and laboratory.

CHM-263 Organic Chemistry I, 5 cr.
This is part of a year long rigorous survey of Organic Chemistry. Modern Organic Chemistry, including nomenclature, syntheses, structure, bonding, mechanisms and carbon and its compounds. This course is for students majoring in pre-medicine, pre-veterinary medicine, chemistry, biological sciences, and for anyone planning to take further courses in chemistry. Lecture and Laboratory. Prerequisite: CHM-176

CHM-273 Organic Chemistry II, 5 cr.
Continuation of CHM-263. This is part of a year long rigorous survey of Organic Chemistry. Classes of organic compounds studied will be aldehydes, ketones, acids and acid derivatives, amines and nitrogen derived compounds. Aromatic compounds, reactions, mechanisms, carbohydrates, nucleic acids, and proteins are covered. Lecture and laboratory.

CHM-948 Special Projects, 2 cr.
Special problems in organic chemistry to cover deficiencies in a student's organic chemistry background.

Computer Programming

CIS-125 Intro Program Logic W/Language, 3 cr.
Studies the most commonly used structured techniques of flow charting included with the concept of data flow in large integrated systems. Also included are systems design, systems analysis and systems development for data processing solutions.

CIS-141 Computer Science, 3 cr.
Introduction to the concepts of computer programming presenting modern structured design and techniques using Visual Basic 6.0 programming language.

CIS-151 Advanced Visual Basic, 3 cr.
This course expands upon concepts of computer programming knowledge gained from Computer Science I (CIS-141), presenting modern structured design and techniques using Visual BASIC 2005 programming language, as well as gaining some insight to industry database programming with a brief introduction to Object Orientated Programming.
CIS-660 PERL/CGI, 3 cr.
This course will introduce the student to writing CGI programs that interface to email servers, record the number of visitors to a web page and the CGI code to a graphical interface. Prerequisite: CIS-202.

CIS-700 Introduction to Linux, 3 cr.
introduction to the Linux operating system. Brief history of Linux and UNIX followed by an in depth, hands on dissection of the operating system with an emphasis on the Command Line Interface (CLI). Students will begin by partitioning a hard drive and installing Linux before proceeding into the minute details of the text and GUI modes of operation. Concepts will include: logging in and out, dealing with files and the file system, Linux process management and general commands.

CIS-928 Independent Study, 1 cr.
Independent study or a special project in computer science.

CIS-941 Computer Science Practicum, 3 cr., 5 cr.
Students will gain practical experience at individual work stations and will be required to report on their field experience. Evaluations will be based on their on-site performance.

Cultural Studies
CLS-131 African Studies, 3 cr.
A survey of the history and contemporary life of Africa from three perspectives: African tradition, contributions of Islam and Western influence. Africa’s economic and social systems and its global relationships are also covered.

Communication
COM-020 Communication Skills, 3 cr.
Focuses on practical writing and business communication and on the types of writing which are useful in a workplace setting. A review of basic writing skills associated with sentencing and paragraph development will be presented, as will an overview of the writing process.

COM-723 Workplace Communications, 3 cr.
Developing skills in reading, writing and listening as they apply to students’ vocational needs.

COM-725 Workplace Communications, 2 cr.
Refining of skills in reading, writing and listening as they apply to the student’s vocational needs.

CON-113 Construction Printreading, 2 cr.
Studies the builders’ visual language and communication.

CON-120 Construction Estimating, 1 cr.
Estimating techniques used at the lumber desk at a retail establishment.

CON-125 Construction Estimating II, 3 cr.
Construction Estimation II is an extension of the concepts learned in the first year in Construction Estimation. Processes learned in the first year class will be implemented and put into practice. Industry professionals will present different methods they use along with computerized estimation programs. Students will develop different estimation sheets for a specific task and implement into practice.

CON-137 Foundations and Concrete, 7 cr.
Covers structure foundations, concrete and concrete block construction. Lecture and laboratory.

CON-138 Intro to Construction, 2 cr.
Basic techniques used by the carpenter in wall framing construction. Lecture and laboratory. P/Q grading.

CON-158 Carpentry Level III, 5 cr.
Carpentry Level Three is the third in the Contra series of The National Certified Carpentry program. It includes lecture and lab including exterior roof, moisture protection, stairs, metal studs, drywall, suspended ceilings, different trim applications, and cabinetry.

CON-159 Carpentry Level IV, 5 cr.
Carpentry Level IV is the fourth in the Contra National certification program series. Level IV includes construction site layout, advanced roof, floor, wall and stair systems, intro to light equipment, metal buildings, and crew leader kills.

CON-201 Framing Techniques and Lab I, 2 cr.
Basic framing techniques with emphasis on identification and application. Lecture and laboratory.

CON-202 Framing Techniques and Lab II, 6 cr.
Explores more advanced framing and applications in major class project. Lecture and laboratory.

CON-217 Exterior Finishing, 3 cr.
Exterior finish work on residential and commercial structures. Lecture and laboratory.

CON-225 Techniques of Exterior Covering, 6 cr.
Studies exterior cover materials for residential and commercial structures. Lecture and laboratory.

CON-228 Methods of Interior Finishing, 3 cr.
Covers interior finishing material and its installation in residential and commercial structures. Lecture and laboratory.

CON-229 Install of Interior Finishing, 3 cr.
Covers interior wall coverings and their application as well as thermal and sound insulation. Lecture and laboratory.
CON-329 Construction Management, 3 cr.
The Construction Jobsite Management student will be introduced to various styles of construction jobsite management through real life jobs with industry representatives and first year Construction Technology students projects. Students will learn about the project team, use of documents on the jobsite, submittals, shop drawings, jobsite layout, meeting control, safety management, changes and claims forms, documents and project closeout record keeping.

CON-431 Construction Internship I, 6 cr.
On-the-job training to gain experience in the student's field of interest.

CON-932 Internship, 3 cr.
The Construction Internship II provides on the job training for area of student interest. This course will have a manager's or supervisor's emphasis with job shadowing and leadership skills the main focus. Students will be required to document their time and discuss with instructor during scheduled meetings.

Criminal Justice

CRJ-100 Intro to Criminal Justice, 3 cr.
Survey of the American criminal justice system, the early, middle and late stages of the criminal justice system are analyzed within the framework of law and research.

CRJ-110 Patrol Procedures, 3 cr.
Broad examination of the various structures and functions of American Law Enforcement agencies and their functional units. The exploration of police procedures revolves around the topics of discretion, effectiveness and efficiency, and constitutional limits.

CRJ-115 Motor Vehicle Law, 1 cr.
Working professionals in law enforcement design a course of study for the students. The content of this course varies with time. Students will be introduced to the Iowa Motor Vehicle Code. Students will investigate laws pertaining to traffic, OWI, and commercial vehicle regulations. The Implied Consent Law will also be examined.

CRJ-116 Law Enforcement Seminar II, 1 cr.
Working professionals in law enforcement design a course of study for the students. The content of this course varies with time.

CRJ-117 Independent Study Law Enforcement, 1 cr.
Course taken to investigate substantive issues in law enforcement.

CRJ-120 Intro to Corrections, 3 cr.
Survey of correctional theory and practice including such topics as: historical foundations of contemporary corrections, applied theory, evaluation research, sentencing and crime prevention.

CRJ-121 Corrections Seminar I, 1 cr.
Students explore human service topics. This is often done with the assistance of correctional professionals or human service personnel in related fields.

CRJ-122 Corrections Seminar II, 1 cr.
See CJ128A. In some circumstances students can work with clients if the setting is different from the agency they choose for their field experience.

CRJ-123 Service Learning Project, 1 cr.
Courses taken to investigate substantive issues in the field of corrections or to begin work with clients in a limited capacity.

CRJ-130 Criminal Law, 3 cr.
This course examines the elements of criminal law. Including the categories of crime by type, defenses, and individuals involved. The course also includes the historical development of criminal law.

CRJ-131 Criminal Law and Procedure, 3 cr.
Examination of the more common crimes, criminal defenses and the procedures used to process a criminal case from arrest to final disposition.

CRJ-133 Constitutional Criminal Procedure, 3 cr.
This course examines the protections afforded to individuals by the US Constitution. Specific areas addressed include initial contact with law enforcement and continues through post-conviction relief. Students should gain an understanding of criminal procedures through statutory and precedent case review.

CRJ-136 Correctional Law, 3 cr.
Examines the law in the correctional setting with obligations of correctional workers.

CRJ-141 Criminal Investigation, 3 cr.
Covers fundamentals of investigation including interviewing and interrogating; collecting and preserving evidence; modus operandi; crime scene search; etc.

CRJ-153 First Responder, 3 cr.
Teaches recognition of symptoms of illness, injuries and proper procedures for basic emergency care. This course is Department of Transportation approved.

CRJ-160 Intro Forensic Investigation, 3 cr.
An introduction to forensic investigation that exposes students to various disciplines and techniques in forensic investigation. Topics included are forensic anthropology, forensic deontology, forensic entomology, forensic serology and criminalistics.

CRJ-166 Intro/Digital File Sys Forensic, 3 cr.
This course will provide Computer Forensics students with a solid foundation in the computer industry's most popular file systems, with an emphasis on forensic processing. The course will begin with a brief overview of hard drive technology and proceed into the abstract world of logical structures. We will begin dissecting logical structures with a look at PC based partitions followed by a forensic minded look at the data structures of the following file systems: le Allocation Table (FAT.x), New Technology File System (NTS), EXT.x and USF 1 and 2.

CRJ-170 Overview of Cybercrime, 3 cr.
This course identifies and discusses the nature of the successful cyber crime investigation and the proper preparation for trial. Students will have a better understanding of current technology used in these crimes.
CRJ-172 Introduction to Digital Forensics, 3 cr.
This course will provide an introduction to the technical aspects of digital evidence identification, collection and analysis. Curriculum will build upon concepts presented in Computer Hardware/A+ and Overview of Cyber Crimes. Topics covered include: Legal framework for search and seizure; evidence preservation, duplication and verification; FAT.x. Students will also get hands-on experience with industry leading forensic software.

CRJ-173 Intermediate Digital Forensics, 3 cr.
This course will build upon concepts presented in Introduction to Digital Forensics. Students will get experience with data acquisition and analysis tools (GUI and CLI), advanced data recovery techniques, email investigations, and guidelines for report writing and expert witness testimony.

CRJ-200 Criminology, 3 cr.
Scientific study of the nature and causes of criminal behavior and social deviance.

CRJ-201 Juvenile Delinquency, 3 cr.
Juvenile justice system is examined from historical constitutional and operational perspectives. Theories concerning juvenile delinquency are explored.

CRJ-207 Drug Use and Abuse, 3 cr.
Designed to help the student understand sociological aspects of drug use, abuse and treatment.

CRJ-214 Survival Spanish for Criminal Justice, 2 cr.
This program is designed to provide non-Spanish-speaking criminal justice students and police officers with functional skills in Spanish. Spanish phrases, commands, and questions practical to daily police and corrections work are covered. No prior knowledge of Spanish necessary.

CRJ-218 Field Experience I - Law Enforcement, 2 cr.
Course designed to provide students with on-the-job experience in a law enforcement agency of their choice. The student will also learn the requirements of the law enforcement profession.

CRJ-219 Field Experience II - Law Enforcement, 3 cr.
Continuation of CRJ-218.

CRJ-220 Community-Based Corrections, 3 cr.
Presents the theoretical and philosophical basis of probation, parole and other community based correctional programs.

CRJ-225 Field Experience I-Corrections, 2 cr.
On-the-job experience in a correctional agency. Students also learn the requirements of a career in the correctional field and receive training in how to find a job.

CRJ-226 Field Experience II - Corrections, 3 cr.
Continuation of CRJ-225.

CRJ-250 Firearms, 1 cr.
Introduction to police firearms safety and care; use of deadly force; chemical agents; firing range safety; latest techniques of combat shooting; and recreational shooting.

CRJ-270 Forensics Computer Science I, 3 cr.
An introduction to the technical aspects of digital evidence identification, collection and analysis. Curriculum will build upon concepts presented in Computer Hardware/A+ and Overview of Cyber Crime. Topics covered will include digital file systems, data recovery and preservation, keyword searches, hard drive and floppy disk imaging, data compression and encryption. Students will receive hands-on training via case study scenarios using state of the art forensic hardware, software and methodologies, utilizing both manual and automated processes.

CRJ-271 Internet Criminal Investigation, 3 cr.
An in-depth study of the structure, protocols and technology of global Internet communication with an emphasis on criminal investigation. Topics covered include TCP/IP, network security, computer viruses and the tracking of Internet activity occurring through email, chat rooms and news groups. Current trends in Internet criminal activity will be discussed and students will perform research on relevant cases and topics.

CRJ-272 Forensics Computer Science II, 3 cr.
This course will provide Computer Forensics students with an introduction to the Linux operating system as a forensic tool for investigators. Students will be introduced to the Linux architecture by installing and configuring Red Had Linux 9.0 and working at the shell prompt. This will be followed by using Linux based tools for forensic analysis of computer systems.

CRJ-273 Comp Forensics Capstone Project, 2 cr.
Presents the theoretical and philosophical basis of probation, parole and other community based correctional programs.

CRJ-920 Field Experience, 5 cr.
Course for students who wish to take all their experience at one time.

Collision Repair & Refinish

CRR-201 Plastic Repair, 2 cr.
Practice in performing all types of repairs to plastic components using modern techniques.

CRR-203 Plastic Repairs Theory, 2 cr.
Students receive instruction and perform all types of plastic and adhesive repair as well as SMC repair. Course is achieved through industry demos, and hands on plastic repairs.

CRR-302 Intro to Collision Repair, 2 cr.
Shop and tool safety, tool and equipment usage and career options in the collision repair industry are studied. Vehicle construction and components are introduced and environmental effects and proper safety, handling and disposal of hazardous materials used in collision repair are studied.

CRR-326 Sheet Metal Repair Theory, 3 cr.
Metalworking skills are emphasized as the foundation of properly repairing damaged metal panels, followed by an understanding of body fillers and shaping techniques. Damage theory is covered in addition to damage analysis and the different types of steel used in automotive construction. Introduction and paint gun use for conversion coatings and primer will be covered.
CRR-327  Sheet Metal Repair Lab, 2 cr.
Metalworking skills are performed by properly repairing damaged metal panels, followed by using body fillers and shaping techniques. Damage analysis and repairing steel panels used in automotive construction are worked with first-hand. Introduction and paint gun use for applying conversion coatings and primer will also be covered.

CRR-328  Sheet Metal Fundamentals Theory, 2 cr.
Metalworking skills are emphasized to understand repairing damaged panels followed by body fillers and shaping techniques. Impact theory is studied in addition to damage/impact analysis and types of steel used in automotive construction.

CRR-329  Sheet Metal Fundamentals Lab, 3 cr.
Metalworking skills are developed in repairing damaged metal panels followed by use of body fillers and shaping techniques. Damage analysis is undertaken and types of steel used in automotive construction are worked with first-hand. Co-requisite: CRR-328.

CRR-351  Collision Lab I, 2 cr.
Students perform a real non-structural repair from beginning to end with direct supervision of the instructor.

CRR-352  Collision Repair Lab II, 2 cr.
Students repair vehicles in the lab based on actual estimates generated by the students. Skills are fine-tuned to sequence a repair plan while improving speed and working efficiently on a production basis. Prerequisite: CRR-351.

CRR-356  Non-Structural Repair Theory, 2 cr.
The basic fundamentals of frame diagnosis and repair on conventional and unitized frames are taught. Also, the types of frame machines and safety are introduced, as well as collision theory. Structural integrity via stationary glass is covered along with its replacement. Includes replacement of structural panels, including both new and used parts. Sectioning techniques are introduced as well as a study in sideswipe, frontal, and rear damages as well as rollover damages.

CRR-357  Structural Repair Theory, 3 cr.
Frame diagnosis and repair on conventional and unitized frames are performed on vehicles. Frame machines, as well as structural integrity via stationary glass is covered along with its replacement. Includes replacement of structural panels including both new and used parts. Sectioning techniques are introduced as well as a study in sideswipe, frontal, and rear damages as well as rollover damages. All above work is performed on actual vehicles.

CRR-358  Structural Repair Lab, 2 cr.
Accident damaged mechanical components are covered in this course. Basic repairs to electrical, suspension, steering, cooking and air conditioning systems are taught, beginning with diagnosis and an understanding of identification and system operations.

CRR-606  Mechanical Repairs Theory, 2 cr.
Basic repairs to electrical, suspension, steering, cooking and air conditioning systems are performed beginning with identification of damaged parts and replacement.

CRR-742  Estimating Theory, 2 cr.
Analyzing and learning to write a cost estimate using a computer as well as printed material. Knowledge of parts, manuals, nomenclature and flat rate charts is covered and shop management techniques are introduced.

CRR-749  Estimating Lab, 1 cr.
Practice in analyzing a job and writing an estimate using a computer as well as printed material. Shop management skills and professionalism are demonstrated. Co-requisite: CRR-742.

CSC-101  Computer Familiarization, 1 cr.
This course is designed to teach students basic computer skills. Emphasis will be a hands-on experience with basic software applications and file maintenance. Utilization of PowerPoint, internet skills and electronic data searches will also be included.

CSC-110  Intro to Computers, 3 cr.
Introduction to microcomputers and their components. Covers computer concepts and management information systems. Hands-on training includes the use of Windows, word processing, spreadsheet, graphics and database programs as applied to the solution of business problems.
**Film and Theatre**

DRA-101  Intro to Theatre, 3 cr.
Introduces drama as a separate literary form as approached historically from Greek drama to the present, including both classic and contemporary drama.

**Disability Services**

DSV-104  Making a Difference: Service Careers, 3 cr.
Introduction to the human services and helping professions. A basic overview of services available, recipient populations and issues related to helping others. Covers professionalism, teamwork and communication skills.

DSV-125  Behavior Management, 3 cr.
Students will develop the beginning skills of observing and managing the behavior of others individually or in groups. This course introduces students to beginning behavior teaching methods and situations. Teaches how-to skills, such as observing, recording, designing, implementing and evaluating behavior programs.

DSV-135  Assessment and Instruction, 3 cr.
This course introduces students to the value base of human services and helping professions. Address strategies and practices used in assessing and evaluating client needs, establishing and identifying resources and making appropriate referrals. Intake interviews and assessments are explored. Students will develop knowledge and basic skills in the area of programming and developing support services and community resources. Ethical issues are also addressed.

DSV-150  Survival Spanish/Soc Services, 2 cr.
Participants learn Spanish skills to use in various Social Services occupational settings. No prior knowledge of Spanish necessary.

DSV-155  Services & Vocational Planning, 4 cr.
Focus is on available support services and vocational aspects of rehabilitation. Content includes identification of job tasks, occupational characteristics and job matching. Students gain understanding of the need for services and the referral process. Job analysis and labor market surveys are completed. Students will develop an appreciation of the psychosocial adjustment aspects of living with a disability. This course will cover both physical and mental disabilities and services available. Students will participate with Service Learning projects.

DSV-160  Counseling Skills, 4 cr.
This is an introductory course in applied counseling techniques. Students are introduced to a variety of facilitative skills and counseling concepts and work through the interviewing process in simulated helping services settings.

DSV-928  Independent Study-Hum Services/Disab St., 1 cr.
Individualized program of study to allow the student to engage in an in-depth study of an appropriate topic.

DSV-932  Internship Human Services/Disab St., 2 cr., 3 cr.
Practical field experience in phases of operation and duties relating to human services, paraeducation, health or rehabilitation. Focus is program writing, data collection, documentation, job skills, and participant outcome.

DSV-941  Practicum, 3 cr., 4 cr., 6 cr.
Practical field experience in phases of operation and duties relating to human services, paraeducation, health or rehabilitation. Focus is program writing, data collection, documentation, job skills, and participant outcome.

**Early Childhood Education**

ECE-103  Intro to Early Childhood Ed, 3 cr.

ECE-110  Child Care Professionals I, 1 cr.
Emphasizes problem solving skills and team building through a variety of group activities. Pre-requisite: Enrollment in Child Care program.

ECE-111  Child Care Professionals II, 1 cr.
Emphasizes human relations skills including communication, leadership, personal appearance, etiquette and job seeking skills. Prerequisite: ECE-110

ECE-112  Portfolio Development I, 1 cr.
Guides students' development of a professional early childhood education portfolio showcasing their knowledge, skills, and dispositions in alignment with the NAEYC Standards for Professional Preparation of Students at the Associate Degree Level. Prerequisite: Enrollment in Child Care or Early Childhood Education programs with at least 6 credits or previous completion of at least 6 ECE credits.

ECE-113  Portfolio Development II, 1 cr.
Guides students' completion and presentation of a professional early childhood education portfolio showcasing their knowledge, skills, and dispositions in alignment with the NAEYC Standards for Professional Preparation of Students at the Associate Degree Level. Prerequisite: ECE-112 Corequisite: To be taken the final semester of Early Childhood program.

ECE-133  Child Health/Safety/Nutrition, 3 cr.
Focuses on current concepts in the fields of health, safety and nutrition and their relationship to the growth and development of the young child ages birth to eight. Blends current theory with practical applications and assessments. Includes the influences of families and diversity on health, safety, and nutrition in early childhood settings.

ECE-140  Early Childhood Curriculum Planning, 3 cr.
Examines and evaluates early childhood curriculum and methods leading to the development and implementation of appropriate curricula for young children. Prerequisite: Completion of Child Care Diploma Program.

ECE-158  Early Childhood Curriculum I, 3 cr.
Focuses on the development, implementation and assessment of appropriate environments and curricula for young children ages three through eight. Includes preparation of developmentally appropriate practices in a context of family and culturally sensitive care. Emphasis is on understanding children's developmental stages and developing appropriate learning opportunities, interactions and environments in the following areas: dramatic play, art, music, fine and gross motor play.
ECE-159  Early Childhood Curriculum II, 3 cr.
Focuses on the development, implementation and assessment of appropriate environments and curricula for young children ages three through eight. Students prepare to utilize developmentally appropriate practices in a context of family and culturally sensitive care. Emphasis is on understanding children’s developmental stages and developing appropriate learning opportunities, interactions and environments in the following areas: emergent literacy, math, science, technology and social studies.

ECE-170  Child Growth and Development, 3 cr.
Reviews typical and atypical development of children from conception to adolescence in all developmental domains. Presents interactions between child, family and society within a variety of community and cultural contexts. Examines theories associated with our understanding of children.

ECE-210  Early Childhood Prof I, 1 cr.
Emphasizes problem solving skills and team building through a variety of group activities. Prerequisite: ECE-111.

ECE-211  Early Childhood Prof II, 1 cr.
Emphasizes human relations skills including communication, leadership, personal appearance, etiquette and job seeking skills. Prerequisite: ECE-210.

ECE-221  Infant/Toddler Care and Education, 3 cr.
Focuses on care, education, and assessment of children from birth to thirty-six months. Prepares students to utilize developmentally appropriate practices including responsive caregiving, routines as curriculum, importance of relationships with diverse families, and a focus on the whole child in inclusive settings.

ECE-243  Early Childhood Guidance, 3 cr.
Focuses on effective approaches and positive guidance strategies for supporting the development of all children. Emphasizes supportive interactions and developmentally appropriate environments. Uses assessment to analyze and guide behaviors. Studies impact of families and diversity on child guidance.

ECE-261  Cont Issues in Child Care, 3 cr.
An in-depth study of current political, economic, social and cultural events and their impact on children and child care.

ECE-262  Early Childhood Field Experience, 3 cr.
Supervised experience in selected early childhood settings serving children ages birth through eight. Includes integration of theory, research, and reflective practice. Provides an understanding of developmentally appropriate practices and the developmental stages of diverse populations of young children and families. Emphasizes professional relationships and behavior, appropriate adult / child interactions, basic curriculum planning, and program routines. Prerequisites: ECE-158, ECE-159, ECE-170, ECE-243, ECE-221 with 2.0 Cumulative GPA and 2.0 GPA in Early Childhood courses

ECE-278  Early Childhood Field Experience II, 3 cr.
Supervised experience in selected early childhood settings serving children ages birth through eight. Expands upon student’s first field experience responsibilities. Includes integration of theory, research, and reflective practice. Provides an understanding of developmentally appropriate practices and the developmental stages of diverse populations of young children and families. Emphasizes professional relationships and behavior, appropriate adult /child interactions, basic curriculum planning, and program routines. Explores the overall operation of a program. Prerequisites: ECE-103, ECE-133, ECE-158, ECE-159, ECE-170, ECE-243, ECE-221, ECE-262, ECE-140, ECE-290 with 2.0 Cumulative GPA and 2.0 GPA in Early Childhood courses

ECE-290  Early Childhood Program Admin, 3 cr.
Covers the basic principles involved in setting up, equipping and administering a child care center. Emphasis is on business procedures, insurance, funding, state and federal regulations, staff and community relations, record keeping, policy writing, program evaluation and child care advocacy. Prerequisite: ECE-272, ECE-261, ECE-140.

Economics

ECN-120  Principles of Macroeconomics, 3 cr.
Reviews national income and output; employment and prices; money and credit; government finance; monetary and fiscal policy; economic growth and development; and international finance.

ECN-130  Principles of Microeconomics, 3 cr.
Reviews the organization and workings of modern economic systems; the role of markets, prices and competition in the promotion of economic welfare, alternative systems and international trade.

Education

EDU-210  Foundations of Education, 3 cr.
An introduction to professional education providing a historical and philosophical background from which the student can examine his or her commitment to education. Challenges and issues in education today will be discussed in the context of school organization, funding, curriculum, professionalism, legal issues and effective teacher characteristics.

EDU-212  Educational Foundations, 3 cr.
An introduction to professional education providing a historical and philosophical background from which the student can examine his or her own commitment to education. Challenges and issues in education today will be discussed in the context of school organization, funding, curriculum, professionalism, legal issues and effective teacher characteristics.

EDU-215  Introduction to Education Lecture, 3 cr.
Introductory professional education course with an overview of the foundations of education in America, including current professional, social and philosophical issues in education.

EDU-217  Introduction to Education Lab, 1 cr.
Students will complete 40 hours of observation and assistance in a K-12 setting.
EDU-218  Initial Field Experience, 2 cr.
Designed to provide experience in a live classroom to observe the way schools work, the role and responsibility of the teacher, and student behavior, and to increase the student’s understanding of the teaching-learning process. Students record experiences in a journal format as part of their portfolio.

EDU-235  Children’s Literature, 3 cr.
Teaches the criteria for choosing the best children’s literature and applies that criteria to evaluating materials to be used in the classroom.

Engineering Technology

EGT-139  Statics Engineering, 3 cr.
Statics Engineering is a course normally taken by engineering students or those seeking employment in engineering firms. In statics, one studies methods for the determination of support forces and relationships between internal force distributions and external loads for stationary structures. Credit for, or enrollment in, college level physics is background necessary for students wishing to enroll in this class.

Emergency Medical Services

EMS-112  EMS First Responder, 3 cr.
Students will learn recognition of symptoms of illness, injuries and proper procedures for basic emergency care. The curriculum for this course is the National Curriculum of the US Department of Transportation, National Highway Traffic Safety Administration and the US Department of Health and Human Services, Child Health Bureau.

EMS-213  Emergency Med Technician B, 5 cr.
Classroom and in-hospital observation and training, examinations and a recommended five emergency ambulance runs are included in this course. Skills taught include recognition of symptoms of illnesses and injuries and proper procedures for care. The course follows the national DOT curriculum.

EMS-215  Emergency Med Tech - Interim, 3 cr.
The first advanced classification of an emergency medical technician. At this level of training the EMT gains more knowledge of certain body systems and assessment. Two skills are added, intravenous therapy and advanced patient assessment. Prerequisite: EMT-Basic certification. Co-requisite: concurrent enrollment in EMS-216.

EMS-216  Emergency Med Tech Lab-Interim, 1 cr.
Laboratory to accompany EMS-215.

EMS-611  EMT-B and Lab, 6 cr.
This course is designed to educate a student to an entry level Emergency Medical Technician – Basic serving a vital link in the chain of the healthcare system. The student will learn and demonstrate skills necessary for the individual to provide emergency medical care at the basic life support level for an ambulance/first responder service or other specialized services. Some of these basic skills are to recognize the nature and seriousness of the patient’s condition, administer appropriate emergency treatment, lift, move, positioning and otherwise handle the patient appropriately. Student should be able to do all this safely and effectively.

EMS-612  Paramedic Spec. - Preparatory and Lab, 6 cr.
This is the first course in a six-course sequence to prepare the student in the roles and responsibilities of the paramedic. This course covers Module I of the DOT National Standard Curriculum for EMT Paramedics. This includes the roles and responsibilities of the paramedic, areas of medical, legal, and ethical issues; in addition, promotion of wellbeing, illness and injury prevention and how they pertain to the paramedic’s role will be discussed. Other areas covered will be general principles of pathophysiology; emergency pharmacology; medication administration, gaining venous access, therapeutic communications and life span development. The lab component of this course will include safe measures for lifting and moving patients, proper use of protective equipment and procedures for personal protection from disease, safe administration of medications and principles of venous access; all will be practiced and demonstrated. Principles of universal precautions will be emphasized throughout the course.

EMS-613  Paramedic Spec. - Airway & Pat. Ass/Lab, 6 cr.
This course can only be taken after successful completion of Paramedic Specialist – Preparatory Course. It is the second course in the Paramedic sequence. The course includes Module 2 (Airway Management and Ventilation) and Module 3 (Patient Assessment) of the DOT National Standard Curriculum for EMT Paramedics. Content will include advanced airway management, physical assessment, field assessment, clinical decision making, documentation and the assessment and management of respiratory emergencies. The lab component of this course includes skills in airway management and ventilation, history taking, techniques of physical examination, patient assessment, clinical decision making, communication and AHA ACLS all will be practiced and demonstrated. This course can only be taken after successful completion of Paramedic Specialist (Preparatory) and Paramedic Specialist (Preparatory) Lab course.

EMS-614  Paramedic Spec. - Trauma & Lab, 4 cr.
This is the third course in the Paramedic sequence. The course includes Module 4 (Trauma) of the DOT National Standard Curriculum for EMT Paramedics. Content will include mechanism of injury, and the skills and management of soft tissue and burn injuries, as well as head, neck, chest, abdominal and other musculoskeletal trauma. The lab component of the Paramedic Specialist - Trauma course includes assessment and management of patient with shock and hemorrhage, burns, soft tissue, spinal cord, thoracic, abdominal, and musculoskeletal injury which will be practiced and demonstrated using the Paramedic Specialist skills check list.

EMS-615  Paramedic Spec. - Clinical, 3 cr.
This course introduces the student to the policies and procedures of a hospital internship where skills learned in previous courses will be practiced while being supervised in various hospital departments.

EMS-616  Paramedic Spec. - Field, 3 cr.
This course introduces the student to a beginning ambulance field experience. Students will apply knowledge and skills learned in previous courses while completing supervised ambulance runs.
EMS-624  Paramedic Spec -Special Consideration/Lab, 4 cr.
This is the sixth course in the Paramedic Specialist sequence. The course includes Module 6 (Special Considerations) of the DOT National Standard Curriculum for EMT Paramedics. Content includes the skills and knowledge necessary to assess and manage specific age population groups including neonatal, pediatric, gerontologic patients. Special situations including chronic care patients, those who have sustained abuse/assault, culturally diverse patients as well as those with physical, mental, social and financial challenges will also be addressed. The lab component of this course will be assessment and management of special situations including neonatal and pediatric resuscitation, elderly and physical and sexual abuse, this will be practiced and demonstrated using the Paramedic Specialist - Special Considerations skills check off list.

EMS-625  PS - Assess Based Mngt/Oper/Lab, 4 cr.
This is the seventh course in the Paramedic Specialist sequence. The course includes Module 7 and 8 (Assessment Based Management and Operations) of the DOT National Standard Curriculum for EMT Paramedics. The course includes assessment and critical decision making using scenarios. Guidelines for safe medical transport, general incident management and mass casualty incident management, rescue and crime scene management, and hazardous materials incidents will also be covered. The lab component of this course will include the student assuming the role of team leader while managing common emergencies. Principles of triage and management of multiple casualty incidents, rescue operations, and hazardous materials incidents will be practiced and demonstrated. Students will also continue to work on completion of the Paramedic Specialist skills check list.

EMS-626  Paramedic Spec. - Clinical II, 4 cr.
This course is a continuation of a hospital internship all modules of the Paramedic Specialist courses must have been successfully completed before taking this course. With this course the skills learned in previous courses will be practiced while being supervised in various hospital departments.

EMS-627  Paramedic Spec - Field II, 4 cr.
This course is a continuation of a field internship all modules of the Paramedic Specialist courses must have been successfully completed before taking this course. This course is a continuation of the ambulance field experience. Students will apply knowledge and skills learned in previous courses while completing supervised ambulance runs.

EMS-628  Paramedic Spec. - Medical I and Lab, 6 cr.
This is the fourth course in the Paramedic sequence. The course includes Part 5 (Medical - Units 1-3) of the DOT National Standard Curriculum for EMT Paramedics. Content will include the skills and knowledge necessary to assess and manage medical emergencies specifically pulmonary, cardiac, and neurological emergencies. The lab component of the Paramedic Specialist - Medical I course will include assessment and management of patients with pulmonary, cardiac, neurological emergencies and will be practiced and demonstrated using the Paramedic Specialist - Medical I, skills check list.

EMS-629  Paramedic Spec. - Medical II and Lab, 6 cr.
This is the fifth course in the Paramedic Specialist sequence. The course includes Module 5 (Medical - Units 4-14) of the DOT National Standard Curriculum for EMT Paramedics. Content will include the skills and knowledge necessary to assess and manage medical, obstetrical/gynecologic and behavioral/psychiatric emergencies. The lab component of this course will include assessment and management of patient with medical, obstetrical/gynecologic and behavioral/psychiatric emergencies and will be practiced and demonstrated using the Paramedic Specialist - Medical II skills check off list.

English Composition

ENG-003  Writing Foundations, 1 cr.
Basic writing course designed for students in certificate programs.

ENG-012  Basic Writing, 2 cr.
Individualized course in general grammar review including usage and punctuation.

ENG-028  Writing Strategies, 2 cr.
Students explore various ways to develop, organize, and communicate ideas. Students learn how to write paragraphs and essays that are acceptable at the college level as well as review grammar, punctuation, spelling and sentence structure.

ENG-062  Intro to College Writing, 2 cr.
This course will prepare students for college level writing.

ENG-101  Elements of Writing, 3 cr.
Students will be provided additional practice in writing beyond the writing foundations level, if needed. A review of grammar and usage skills is included along with writing practice involving the process approach of prewriting, drafting, and rewriting. This course will not meet requirements for AA degree or AS degree.

ENG-105  Composition I, 3 cr.
Emphasis on expository and argumentative writings including a review of usage and mechanics. Prerequisite: satisfactory score on the ACT, ASSET or COMPASS as determined by Iowa Lakes policy, or completion of ENG-028.

ENG-106  Composition II, 3 cr.
Continuation of ENG-105 with emphasis on research and documentation as well as literary analysis. Prerequisite: ENG-105.

ENG-221  Creative Writing, 3 cr.
Processes and methods of creating poetry and fiction. Reading the work of professional writers and applying various techniques of imaginative writing through workshops, discussion and individual conferences.

Environmental Science

ENV-145  Conservation Biology, 4 cr.
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. Labs will involve field work, data analysis, computer work and research.
English as a Second Language

ESL-045  ESL Reading III, 3 cr.
This course is designed to introduce students with limited English proficiency to the written language skills that will be needed in order to be successful in college classes and in the community. While its focus will be primarily on the graphically related skills of reading and writing, it will also introduce students to basic speaking and listening skills as well as expand vocabulary, grammar, and syntax knowledge. It is designed as the reading companion course to English as a Second Language Intermediate Writing. Prerequisite: ESL Compass reading score below 70.

ESL-051   ESL Writing III, 3 cr.
This course is designed to introduce students with an intermediate English proficiency to the written language skills needed to be successful in college classes and in the community. It will introduce students to basic writing skills as well as expand vocabulary, grammar and syntax knowledge. Prerequisite: ESL Compass score below 70.

ESL-065   ESL Reading IV, 3cr.
This class continues a student's development of the Cognitive Academic Language Proficiency (CALP) skills required for college reading success. Prerequisite: ESL-045 or ESL Compass reading score above 70.

ESL-071   ESL Writing IV, 3cr.
This course is designed to introduce students with an intermediate English proficiency to the written language skills needed to be successful in college classes and in the community. It will introduce students to basic writing skills as well as expand vocabulary, grammar and syntax knowledge. Prerequisite: ESL-051 or ESL Compass writing score above 70.

ESL-074   ESL Listening/Speaking IV, 3 cr.
This course is designed to introduce students with limited English proficiency to the oral language skills that will be needed in order to communicate successfully in academic classes and in the community. Students will learn the basics of note taking in lecture, audio, and audio visual presentation in academic situations. They will learn how to gist, how to recognize important points, organize and outline information presented in audio and visual formats. They will also learn the basics of small group facilitation and leadership. Writing assignments will include classification, analysis, analogy, and other expository devices. They will be exposed to a variety of dialects, speech patterns, idioms, and cultural forms of communication appropriate to the classroom/college experience. Additionally, students will receive extensive instruction in pronunciation necessary for academic discourse. While its focus will be primarily on the oral skills of listening and speaking, it will also introduce students to basic reading and writing skills as well as expand vocabulary, grammar, and syntax knowledge. Prerequisite: ESL Compass score below 67.

ESL-077  ESL Listening/Speaking V, 3 cr.
This course is designed to introduce students with limited English proficiency to the oral language skills that will be needed in order to communicate successfully in academic classes and in the community. Students will learn the basics of note taking in lecture, audio, and audio visual presentation in academic situations. They will learn how to gist, how to recognize important points, organize and outline information presented in audio and visual formats. They will also learn the basics of small group facilitation and leadership. Writing assignments will include classification, analysis, analogy, and other expository devices. They will be exposed to a variety of dialects, speech patterns, idioms, and cultural forms of communication appropriate to the classroom/college experience. Additionally, students will receive extensive instruction in pronunciation necessary for academic discourse. While its focus will be primarily on the oral skills of listening and speaking, it will also introduce students to basic reading and writing skills as well as expand vocabulary, grammar, and syntax knowledge. Prerequisite: ESL Compass score 67 and above.

Environmental Studies

EVS-114   Environmental Studies I, 4 cr.
Environmental Studies I is an introduction to ecology and environmental science. This course acquaints the student with the relationship between humans and their environment and the environmental problems that often develop because of this relationship. Topics covered include concepts of ecology, population dynamics, human ecology and environmental law. Lecture and laboratory.

EVS-124   Environmental Studies II, 4 cr.
Environmental Studies II is an introduction to the study of global resources management and the analysis and control of environmental pollution. This course acquaints the student with the fundamentals of resource management and the physical, chemical, and biological analysis of pollutants that contaminate the Earth’s biosphere. Topics covered include global resources, resource management, environmental pollution and pollution control. Lecture and laboratory.

EVS-203   Environmental Seminar I, 1 cr.
Environmental Seminar I is an opportunity for career exploration and development of job seeking skills. Emphasis is placed on familiarization of environmental and conservation agencies, resume’ preparation, and job seeking skills including preparation of job correspondence and application forms, and participation in job interviews.

EVS-204   Environmental Seminar II, 1 cr.
Environmental Seminar II is an opportunity to prepare for participation in cooperative education and to develop a presentation to be made in a seminar format. Emphasis is placed on continued development of job seeking skills, preparation for the Environmental Studies Practicum, and the skills needed to prepare and make a presentation addressing a current environmental topic.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVS-234</td>
<td>Introduction to Environmental Technology</td>
<td>4 cr.</td>
<td>Introduction to Environmental Technology places an emphasis on the recognition, inventory, and evaluation of environmental pollutants. Attention is given to the sources and types of environmental pollutants and the problems that they create. Topics covered include environmental impact, air pollution, water pollution, and hazardous materials.</td>
</tr>
<tr>
<td>EVS-244</td>
<td>Environmental Technology Techniques</td>
<td>4 cr.</td>
<td>Environmental Technology Techniques places an emphasis on the problems associated with environmental pollution and the techniques available to monitor, document, and control environmental pollution. Attention is given to those environmental problems that may cause sickness or impaired health in humans. Topics covered include environmental regulations, environmental safety, control of pollutants, and waste management.</td>
</tr>
<tr>
<td>EVS-254</td>
<td>Intro to Natural Resources Management</td>
<td>4 cr.</td>
<td>Introduction to Natural Resources Management places an emphasis on the recognition, inventory, and conservation of natural resources. Attention is given to the distribution and availability of natural resources and the limitations associated with their usage. Topics covered include management of natural resources, hydrospheric resources, lithospheric resources, and atmospheric resources. Lecture and laboratory.</td>
</tr>
<tr>
<td>EVS-264</td>
<td>Natural Resources Management Techniques</td>
<td>4 cr.</td>
<td>Natural Resources Management Techniques places an emphasis on the problems associated with the usage of natural resources and the techniques available to evaluate, develop, and manage natural resources. Attention is given to renewable resources and the management techniques that can be utilized to best conserve these resources. Topics covered include wildlife management, forest and recreational land management, agricultural and rangeland management, and fisheries management.</td>
</tr>
<tr>
<td>EVS-941</td>
<td>Practicum</td>
<td>4 cr.</td>
<td>Environmental Studies Practicum is an opportunity for students to gain hands-on experience in a field and/or laboratory setting through a cooperative education agreement between the college and the sponsoring agency, business, or individual. The practicum is meant to be an actual job situation in environmental technology or natural resources management.</td>
</tr>
<tr>
<td>FIN-101</td>
<td>Principles of Banking</td>
<td>3 cr.</td>
<td>Fundamentals of bank functions, designed for bankers and prospective bankers. Develops an understanding of where banking has been and where it is going. Studies deposit, payment and credit functions as well as funds management and specialized products and services.</td>
</tr>
<tr>
<td>FIN-121</td>
<td>Personal Finance</td>
<td>3 cr.</td>
<td>The basics of budgeting and buying, the intricacies of home ownership, income tax and investments and the use of insurance, wills and trusts.</td>
</tr>
<tr>
<td>FIN-140</td>
<td>Business Finance</td>
<td>3 cr.</td>
<td>Financial principles, statement of changes in financial position, income statement and balance sheet analysis to aid in asset management by financial personnel.</td>
</tr>
<tr>
<td>FIN-180</td>
<td>Intro to Investments</td>
<td>3 cr.</td>
<td>Study of the many complex and intriguing components of the investment world for both the business world and personal use.</td>
</tr>
<tr>
<td>FLS-112</td>
<td>Spanish for Professionals: Bus</td>
<td>2 cr.</td>
<td>Participants learn Spanish skills to survive in a Latin American setting. In addition, they are taught to identify and overcome common cultural barriers encountered by U.S. business personnel when dealing with Latin Americans. No prior knowledge of Spanish necessary.</td>
</tr>
<tr>
<td>FLS-141</td>
<td>Elementary Spanish I</td>
<td>4 cr.</td>
<td>Introduction to the Spanish language and culture; practice in all the basic skills.</td>
</tr>
<tr>
<td>FLS-142</td>
<td>Elementary Spanish II</td>
<td>4 cr.</td>
<td>Continuation of FLS-141, which is a prerequisite.</td>
</tr>
<tr>
<td>FLS-241</td>
<td>Intermediate Spanish I</td>
<td>4 cr.</td>
<td>Review and expansion of grammar, selected reading and further practice in oral and written communication. Prerequisite: FLS-142.</td>
</tr>
<tr>
<td>FLS-242</td>
<td>Intermediate Spanish II</td>
<td>4 cr.</td>
<td>Continuation of FLS-241, which is a prerequisite.</td>
</tr>
<tr>
<td>FLS-946</td>
<td>Seminar</td>
<td>1 cr.</td>
<td>Special projects within a small group.</td>
</tr>
<tr>
<td>GEO-115</td>
<td>Human Geography</td>
<td>3 cr.</td>
<td>Survey course introducing students to the geographical study of the relationship of humans to the environment and the spatial patterns of human activities.</td>
</tr>
<tr>
<td>GEO-121</td>
<td>World Regional Geography</td>
<td>3 cr.</td>
<td>Introductory course in college geography dealing with location, interaction and interdependence of countries of the world.</td>
</tr>
<tr>
<td>GRA-118</td>
<td>Electronic Publishing</td>
<td>3 cr.</td>
<td>Basic understanding of the components used in an electronic publishing system and an introduction to desktop publishing. Emphasis is on using a computer for page layout using existing art, creating art and combining text and art to create page layouts and output to hard copy. Software training on Adobe InDesign.</td>
</tr>
<tr>
<td>GRA-121</td>
<td>Digital Drawing</td>
<td>3 cr.</td>
<td>Graphic image design introduction using the Adobe® Illustrator program. Students will create both black and white and multicolor graphics using Illustrator’s tools and menu commands. A vinyl cutting project will be completed.</td>
</tr>
<tr>
<td>GRA-140</td>
<td>Digital Imaging</td>
<td>3 cr.</td>
<td>Introduction to the image editing software Adobe® Photoshop. Students will work with basic techniques, manipulation of photographic images, and the use of layers.</td>
</tr>
</tbody>
</table>
GRA-158 Web Multimedia, 3 cr.
This course focuses on the creation of web animations and practical knowledge regarding basic video capturing, editing and how to create it for presentations, video CDs/DVDs and the web. Students will gain practical knowledge of image animation for the web and how to capture video for different formats, edit the video, convert it for use in different platforms and how to burn it to CD or DVD. Popular software will be used to create and manipulate images and to explore various video and audio formats including streaming video.

GRA-162 Web Page Graphics, 3 cr.
An introduction to the creation of graphics and animation for use on web pages using current software programs such as Adobe Photoshop, Illustrator, and Flash. This course first introduces the standard Web based image formats and then quickly moves into the Flash environment. Flash concepts include animation basics, tweening, Flash symbols and instances, buttons, movie clips, and beginning ActionScript.

GRA-166 Web Animations, 3cr.
This course advances the ideas introduced in Flash I (GRA-228) to create interactive and media rich content for a variety of projects. As this is an advanced level course, you'll be expected to excel in your projects through your efforts. Students will continue working on time and sound sequencing, storyboard planning for information mapping and animations, rendering files and documents for CD or the Internet. Students will learn advanced ActionScript 3.0 scripting technologies that extend the creative function of web animation. Unique vector and raster methods will be employed while working with software such as Adobe Flash. Students will further their problem solving abilities to utilize time and materials for solutions to distinct interactive problems.

GRA-175 Graphic Design, 3 cr.
Students work with advanced design problems and concepts. Emphasis is placed on the design and preparation of a resume and portfolio.

GRA-188 Advert Layout & Composition, 3 cr.
Balance, proportion and harmony as they apply to printed images on paper. Type selection, copy-fitting, use of ornaments and the psychology of advertising are included.

GRA-228 Flash I, 3cr.
This introductory course focuses on developing an understanding of manipulating two-dimensional objects into an animation for the web. Students will work with storyboards, vector graphics, timing and key framing, sound, nesting and scenes, and rendering. Project's final output will be posted on the web or produced for CD. Major software used in this course includes Adobe Flash, Adobe Photoshop, and Adobe Illustrator. All aspects of course projects will be completed by the student - this includes original imagery, sound and video, and artwork. The assignments will acquaint students with the needs and procedures of creating 2D web animations for the market and still be a balance of both web and video animation.

GRA-234 Dreamweaver Level I, 3 cr.
This introductory course focuses on the proper use of web technologies to design and develop web sites. You will use Adobe Dreamweaver to learn how to create properly structured XHTML and Cascading Style Sheet documents, incorporate images, work with colors and backgrounds, present data in tables, and use CSS for laying out web pages.

GRA-235 Dreamweaver Level II, 3 cr.
This course focuses on Advanced CSS and XHTML as well as benefits of web standards and their role in Search Engine Optimization. Topics include CSS navigation methods, advanced CSS layouts and techniques, working with and styling forms, formatting and styling tables, frames and framesets, styling and controlling pages for print, alternative media style sheets, controlling presentation for mobile devices, and working with multiple style sheets.

GRA-236 Dreamweaver Level III, 3 cr.
Combines skills learned from Dreamweaver Levels 1 & 2 with server-side languages and databases such as PHP and MySQL. Topics include PHP syntax and language operating environment, using control structures, loops, and arrays in PHP, form processing, database manipulation, handling record sets, data validation, and concepts and design of Content Management Systems.

GRA-717 Introduction to Photoshop 7, 1 cr.
This course teaches students the most practical features of Photoshop 7. Online course; P/Q grading.

GRA-720 Photoshop 6 for Absolute Begin, 1 cr.
This course teaches students the use of Photoshop with simple, detailed, step-by-step instructions. Online course; P/Q grading.

GRA-721 Introduction to Photoshop 6, 1 cr.
This course teaches students to use layers, filters, actions, blends, composites, seamless patterns, fill layers, and the free transform command. Online course; P/Q grading.

GRA-730 Photoshop 7 for Absolute Beg, 1 cr.
How to use PhotoShop with simple, detailed, step-by-step instructions for working with graphics on a personal computer. Online course; P/Q grading.

GRA-766 Photoshop Basics, 1 cr.
Using Adobe PhotoShop to alter photographs, create digital collages, scan images and print them properly or download them to the web. Online course. P/Q grading.

GRA-794 Marketing Bus/Org on Internet, 1 cr.
Helps small business owners, marketing directors, advertising personnel, web site designers and others to develop and implement a web strategy or Internet marketing plan. Online course. P/Q grading.

GRA-928 Independent Study, 1 cr.
Independent study or a special project in art.

GRA-932 Internship, 4 cr.
Supervised, paid work experience in a business or industry involved in an area of graphic design.
## Health Care Administration

**HCA-110  Health Care Administration I, 3 cr.**
This course is designed to provide the learner with a basic knowledge of the long term care environment and the administrator’s role in this environment. Historical perspective, organizational structure, human resource management, the health care environment, and management of quality and change will be emphasized.

**HCA-111  Health Care Administration II, 3 cr.**
Building on the team approach to providing services, this course will identify the types of service units with which the administrator will have contact and/or will manage. Each service unit will be examined in depth.

**HCA-112  Health Care Administration III, 3 cr.**
This course is designed to provide the learner with basic knowledge of building design, layout and facility maintenance; physical plant construction and financing. The Life Safety Building Code will be reviewed.

**HCA-120  Legal and Political Aspects Health Care, 3 cr.**
This course presents an overview of the legal issues facing the health care industry, in particular the nursing home industry. It provides students with a basic understanding of health care law and an overview of a wide variety of health care legal and political issues. Learners are provided with practical information of health law and its application to the working environment of health care administration.

**HCA-125  Health Care Accounting, 1 cr.**
Accounting as related to the health care industry including understanding financial statements and ratios; preparing an operating budget; using financial analysis to help with decision-making.

**HCA-130  Communication With the Elderly, 3 cr.**
The process of aging and its effects on communication behavior. An introduction to communication theories and principles as they apply to communication with the elderly. Skills and strategies for facilitating more satisfying and effective communication between the students and the elderly.

**HCA-135  Gerontology, 3 cr.**
Introduction to the issues and problems relating to the process of aging and the later stages of the adult life cycle. The physical aging process, the roles of the aged in our society and the complex psychological and sociological aspects of aging are covered.

**HCA-163  Intro to Senior Living Communities, 3 cr.**
This course is an introduction to assisted living, congregate and continuing-care retirement communities. It focuses on administration, resident services, marketing and sales, ancillary services and contracts.

**HCA-280  Health Care Practicum I, 2 cr.**
Examines the leadership role of the administrator and the processes of planning, organizing and directing for which an administrator is responsible. The purpose and use of policies and procedures in facility management are discussed.

**HCA-281  Health Care Practicum II, 3 cr.**
Examines the nature, scope and performance of each segment of the team providing services to the resident-client.

**HCA-282  Health Care Practicum III, 2 cr.**
Examines the planning, operation and maintenance of the physical plant, including planning for emergency situations.

**HCA-283  Health Care Admin Practicum IV, 2 cr.**
Exposes students to the legislative/political process, to state nursing home organizations and to the role of the administrator in the political arena.

**HCA-284  Health Care Admin Practicum V, 2 cr.**
Studies the sources of institutional revenue and expense.

**HCA-285  Health Care Admin Practicum VI, 1 cr.**
Observation of all departments within residential care facilities, hospitals and other health care facilities.

**HCA-946  Seminar, 1 cr.**
Seminar for those planning to take the Iowa state board examinations for licensure.

## Hospitality Culinary & Management

**HCM-104  Applied Food Service Sanitation, 4 cr.**
Information and practices to help the food service manager apply sanitation procedures to food handling from purchasing and storage to preparation and serving to patrons. This course is part of the National Restaurant Association management development diploma program and certification.

**HCM-105  Food Fundamentals, 4 cr.**
Reviews the skills and attitudes needed for successful employment in the food service industry. This course and its components are the latest additions to the ProMgmt program. PrpMgmt is a college-level curriculum driven by industry research and academic excellence and created by the educational foundation of the National Restaurant Association and the Culinary Institute of America.

**HCM-141  Food Production, 5 cr.**
Preparation of menus and serving foods and aesthetic appeal for dining rooms. Emphasizes meat, vegetables and dessert cookery. Sanitation, quality and cost of foods served to consumers are stressed.

**HCM-206  Food Lab I, 2 cr.**
An elective course designed to introduce students to the actual operation of quick service institutional cookery, cafeteria operations and banquets.

**HCM-207  Food Lab 2, 2 cr.**
An elective course designed to introduce students to the actual operation of quick service institutional cookery, cafeteria operations and banquets.

**HCM-208  Food Lab 3, 2 cr.**
An elective course designed to introduce students to the actual operation of quick service institutional cookery, cafeteria operations and banquets.

**HCM-209  Food Lab 4, 2 cr.**
An elective course designed to introduce students to the actual operation of quick service institutional cookery, cafeteria operations and banquets.
HCM-299 Nutrition for the Life Cycle, 4 cr.
Practical, 'how-to' course focusing on nutrition as it relates to personal health; foods, and food preparation; menu planning and recipe codification; and marketing of nutritious menu items in the food service industry.

HCM-237 Modified Diets, 4 cr.
Focuses on the basic principles of diet therapy and menu modification for several diseases. Covers nutrition assessment, care plans, anthropometric measurements, diet history and diet instruction.

HCM-265 Mathematics for Hospitality, 3 cr.
Reviews the fundamentals of mathematics, including methods of figuring percent, discount, mark-up, mark-down and interest. Problems related to the hospitality industry and practice on the ten-key calculator will be included.

HCM-310 Hospitality Law, 3 cr.
Provides an awareness of laws concerning hotel-motel management and illustrates the possible consequences of failure to satisfy legal obligations.

HCM-319 Intro to Hospitality Field, 3 cr.
A detailed look at restaurant and institutional food service operations, hotel and motel management, travel, tourism and international hospitality. Students will learn to better evaluate career opportunities, learn the level of quality and service necessary in an ever-changing industry.

HCM-450 Job Seeking Skills I, 2 cr.
Students are exposed to a variety of hospitality areas through field trips and interaction with people currently in the hospitality industry. The class will involve job seeking skills and include actual job search and interviewing experience.

HCM-451 Job Seeking Skills II, 2 cr.
Students are exposed to a variety of hospitality areas through field trips and interaction with people currently in the hospitality industry. The class will involve job seeking skills and include actual job search and interviewing experience. A continuation of HCM-450.

HCM-590 Housekeeping Management, 3 cr.
This course is designed to provide important technical information for persons seeking careers in the pivotal area. Every attempt has been made to thoroughly cover the day-to-day complexities of the housekeeping profession - planning and organizing to budgeting, to supervising and performing the work itself. This is a certification course offered through the American Hotel and Motel Association. It is your link with the global hospitality industry.

HCM-591 Housekeeping Management, 3 cr.
Technical information for persons seeking careers in the hospitality management area. Covers the day-to-day complexities of the housekeeping profession, from planning and organizing to budgeting, supervising and performing the work itself. Certification course offered through the American Hotel and Motel Association.

HCM-592 Convention Management, 3 cr.
A course designed to provide practical insight into the different kinds of meetings and conventions, the types of organizations that stage such events, and the people who hold the key to site selection. To provide advice and suggestions on how to reach and sell to these important groups and people. To learn how to analyze a hotel property to determine which segments of the market may be sold and serviced successfully and how to organize a staff to go after desired business. Practical advice is also given on how to finalize an event through negotiations and letters of agreement.

HCM-593 Restaurant Management, 4 cr.
Introduces the principles of modern restaurant and food service management: purchasing, storing, inventory, food service equipment, menu design, restaurant design and food service operations.

HCM-594 Food & Beverage Management, 4 cr.
Includes buying food in quantity and methods of food production for large groups with practical experience gained in a laboratory study of sales, service and control of beverages.

HCM-595 Front Office Operations/Night Audit, 4 cr.
Emphasizes the efficient operation of the front office area, including reservations, greeting guests, hotel-motel services and payments. Charge account systems and controls, billing methods, checkout procedures and a learning experience with an accounting posting machine are included.

HCM-705 Hospitality Club Activities, 1 cr.
Developing leadership, teamwork, communication, commitment and cooperation as required in the hospitality industry.

HCM-707 Hospitality Club Activities II, 1 cr.
Developing leadership, teamwork, communication, commitment and cooperation as required in the hospitality industry.

HCM-709 Hospitality Club Activities III, 1 cr.
Developing leadership, teamwork, communication, commitment and cooperation as required in the hospitality industry.

HCM-711 Hospitality Club Activities IV, 1 cr.
Developing leadership, teamwork, communication, commitment and cooperation as required in the hospitality industry.

HCM-938 On-The-Job Training, 5 cr.
On-the-job training, usually full-time, in a hotel, motel, restaurant or related business.

History

HIS-110 Western Civilization: Ancient to Modern, 3 cr.
Surveys the origins of human civilization in the Near East, the great rise of Greece and Rome and concludes with the Enlightenment.

HIS-111 Western Civilization: Modern to Present, 3 cr.
Examines an extremely dynamic phase of European and world history.

HIS-151 U.S. History to 1877, 3 cr.
Study of national foundations, colonial background, revolution, confederation and institutions; nationalism and expansion. The growth of democracy and war plus reconstruction are analyzed.
HIS-152  U.S. History Since 1877, 3 cr.
Covers re-union growth of big business, expansion and World War I, rise to world power, isolation, modern industry, depression, recovery and internationalism.

HIS-201  Iowa History, 3 cr.
Provides an understanding of the history of Iowa as it relates to international history. Special attention is given to ethnic groups and their contributions.

HIS-251  U.S. History 1945 to Present, 3 cr.
Investigation of the rise of the United States after World War II to the modern country of the present. Topics include: aftermath of World War II, nuclear power, the Cold War, Vietnam, diplomacy, presidential power, and family life.

HIS-255  American Indian History & Culture I, 3 cr.
A survey of the important events and cultures of the Native American people from the earliest times to the reservation era. The survey will be limited to the Native people of the United States and Alaska.

HIS-275  African American History, 3 cr.
Deals with the experience of blacks in the history of the United States. Topics include African Heritage, the slave trade, slavery in the Antebellum South, the Civil War and emancipation, the Jim Crow era, the Harlem Renaissance, the civil rights struggle, and modern black America.

HIS-285  Classical Heritage, 3 cr.
An introduction to music and art in the western world. The period from Classical Greece to the present is studied.

Health Information Technology

HIT-244  Basic CPT Coding, 3 cr.
Systematic coding concepts using CPT/HCPCS coding and classification systems. Emphasis is placed on assigning and classifying valid procedure codes in ambulatory care, emergency room, operating room and physician office settings. Students work with actual medical records, placing emphasis on accuracy outpatient coding guidelines and conventions, reimbursement and billing as well as compliance issues.

HIT-245  Basic ICD-9-CM Coding, 3 cr.
Classification of disease and diagnostic processes through ICD-9 coding, placing emphasis on accuracy, concepts and compliance issues. ICD-9 coding is used for identification of medical necessity in procedures, reimbursement, utilization patterns and the study of health care costs.

Health Sciences

HSC-114  Medical Terminology, 3 cr.
Studies medical terminology, including spelling and definitions.

HSC-134  First Aide/CPR, 1 cr.
Emergency care for the injured. Airway management, hemorrhage control, care for shock victims, CPR/lifesaving skills.

HSC-145  Pharmacology in Nursing, 3 cr.
Provides the student or practicing LPN or RN with a reliable and current pharmacological basis, emphasizing the nurse’s role in applying the knowledge of medications to patient care.

HSC-146  Medication Aide, 2 cr.
This 50 hour medical aide course is for certified Nurse Aides or Residential Attendants and prepares them to administer oral medication in long term care facilities, as outlined by the Iowa Department of Public Health.

HSC-163  Nutrition, 3 cr.
Provides the student with a basic background of the nutrients which are essential in maintaining the physical and mental well being of the human body. An overview of the digestive process and its relationship to each group of nutrients is presented. Basic nutritional principles of food selection are studied with an emphasis on health promotion throughout the life cycle. Students examine their personal eating habits and identify ways to promote a healthy nutritional status.

HSC-172  Nurse Aide, 3 cr.
The academic component of the program preparing persons for employment as a nurse aide in long term care and in skilled nursing units in Iowa’s Hospitals. The clinical component may be accomplished by completing HSC-177. Upon satisfactory completion of both course, which meet both federal and state requirements, the student is eligible to write the state-approved competency examination and skill test for certification.

HSC-177  Nurse Aide II, 3 cr.
Classroom and clinical experience combine to provide training in basic nursing skills, attitudes and understanding the role of the nurse aide. Prerequisite: HSC-172.

HSC-186  Human Growth and Development, 3 cr.
Exploration of the normal characteristics, physical, social and emotional development of individuals from infancy through the aged adult. This course will include a discussion of how the various theorists view the stages of growth and development through the lifespan.

HSC-187  Human Growth and Development – Adult, 1 cr.
An exploration of the normal characteristics, physical, social and emotional development of individuals from the young adult through the aged adult. This course will include a discussion of how various theorists view the stages of growth and development through the lifespan.

HSC-194  Rehabilitative/Restorative Aid, 3 cr.
Prepares persons who are working as nurse assistants with the knowledge and skills to safely and effectively provide rehabilitative therapies under the direction of a physical therapist or occupational therapist. Prerequisite: knowledge and skills at the nurse assistant level and experience working with chronically ill or aging residents or patients.

HSC-217  Introduction to Pathology, 3 cr.
This course is designed to provide the student with the body systems disease process by presenting the disorders, etiology, progression, signs and symptoms and standard approaches to diagnosis and treatment.

HSC-223  Human Relations, 2 cr.
Designed to promote understanding of human interactions, including motivation, emotion, intelligence, personality as well as social relations with application to the institutional setting and manager/employee and employee/employee relationships.

HSC-235  Supervision in Health Care, 2 cr.
Assists registered nurses and licensed practical nurses in gaining knowledge and developing skills useful in managing personnel and client care.
Human Services

HSV-140  Social Work and Social Welfare, 3 cr.
Goals, values and legal aspects of the social work professionals. Roles of social workers in human service institutions. Service learning experience at an agency is included.

HSV-162  Intro to Human Disabilities & Services, 3 cr.
Introduces classifications, etiology, characteristics, educational and vocational considerations of persons with disabilities.

HSV-225  Counseling Skills, 3 cr.
This is an introductory course in applied counseling techniques. Students are introduced to a variety of facilitative skills and counseling concepts and work through the interviewing process in simulated helping service settings.

Journalism

JOU-115  Introduction to Journalism, 3 cr.
Students receive an overview of the journalism profession. Emphasis focuses on the fundamental principles of news gathering and writing, copy reading, proofreading, editing, and newspaper makeup. Substantive areas include the history and contemporary state of journalism.

JOU-120  Beg News Writing, 3 cr.
This course will cover the processes of understanding what is news, methods of gathering information for news stories, writing stories, editing principles, writing cut lines and headlines, editorials and feature stories, for print, audio and video. Students will contribute stories to the college newspaper, radio and television newscasts and supplement the stories with video.

JOU-121  Newswriting and Reporting, 3 cr.
The process of understanding what is news, methods of gathering information for news stories and writing news stories; editing principles, writing headlines and photo captions, editorials and feature stories.

JOU-140  Newspaper Lab I, 2 cr.
Provides the student with the skills and knowledge of newspaper operations, including deadline pressures, story writing, photography, editing, layout and beats.

JOU-141  Newspaper Lab II, 2 cr.
Continuation of JOU-140.

JOU-171  Introduction to Photography, 3 cr.
Introduction to the 35mm camera: selection and handling; theory of light; lenses and focusing; depth of field and film types; com

JOU-173  Digital Photography, 3 cr.
Basic digital theory, how the digital camera works. Includes digital capture; input into the computer; digital manipulation; basic PhotoShop and photography; saving digital images for future use and long term archiving on zip disks, CD’s and hard drives; how to print digital images; and how to send digital images after formatting for sending.

JOU-176  News & Forensic Photography, 3 cr.
A survey of basic photographic skills needed to create publishable news photographs using 35mm and digital cameras. A survey of basic photographic skills needed to create photographs for police department and court use of crime scenes, evidence, individuals and for inter-departmental use.

JOU-210  Media Law and Ethics, 3 cr.
Legal, ethical and business concerns surrounding the mass media, as contemporary issues and from historical perspectives.

JOU-220  Advanced Newswriting, 3 cr.
This course follows a basic journalism writing course. Students will develop advanced skills in writing in AP style, research and news gathering, and identifying news stories. They will learn how to develop news sources, how to develop multiple stories from one source or meeting, and how to write multiple-source stories.

JOU-240  Newspaper Lab III, 2 cr.
Continuation of JOU-141.

JOU-241  Newspaper Lab IV, 2 cr.
Continuation of JOU-240.

JOU-941  Practicum, 2 cr., 5 cr.
Practical work experience related to journalism.

Paralegal/Legal Studies

LGL-111  Introduction Law and Paralegal, 3 cr.
An introduction to the legal profession with special emphasis on the responsibilities of the paralegal. Students will learn the core skills required of paralegals, including verbal and written communication, critical thinking and analytical reasoning, and investigation and case management. The course also addresses the ethical obligations of paralegals.

LGL-140  Wills, Trusts and Estate Admin, 3 cr.
A study of wills, trusts, probate procedures, estate administration taxes, and testament and intestate succession. Students will learn how to draft basic wills, trusts, and advance health care directives. Students will also learn how to administer a typical estate.

LGL-151  Legal Research & Writing I, 4 cr.
An introduction to the legal research and writing process with an emphasis on writing case briefs and objective memoranda of law.

LGL-155  Legal Writing and Drafting, 2 cr.
Detailed examination of the various types of legal documents, their content and preparation.

LGL-180  Torts and Litigation, 3 cr.
A study of tort law, including negligent, intentional, and strict liability torts. Students will learn how to draft pleadings, discovery requests, and pretrial documents in tort cases.

LGL-200  American Trial Process, 3 cr.
A study of the American trial process. Students will research, prepare and present a hypothetical case to a judge and jury.

LGL-205  Employment Law, 3 cr.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGL-240</td>
<td>Civil Procedure and Practice, 4 cr.</td>
<td></td>
<td>A study of civil procedure using the civil procedure rules. Students will learn how to draft demand letters, pleadings, motions, discovery, and judgments. Students will also learn how to prepare a small claims case.</td>
</tr>
<tr>
<td>LGL-250</td>
<td>Family Law, 3 cr.</td>
<td></td>
<td>Study of law and procedures relative to marriage, dissolution and adoption.</td>
</tr>
<tr>
<td>LGL-771</td>
<td>Introduction to Criminal Law, 1 cr.</td>
<td></td>
<td>An in-depth look at criminal law and the real world of prosecutors, defense attorneys, and the paralegals who work closely with them.</td>
</tr>
<tr>
<td>LGL-772</td>
<td>Evidence Law, 1 cr.</td>
<td></td>
<td>As courts get more crowded, busy attorneys are relying more and more on paralegals, legal secretaries and law clerks to help them gather and evaluate evidence and prepare cases for trial. This course will provide background information in these exciting areas of law.                                                                                                                                                                                                                                                                                                                                作出的。</td>
</tr>
<tr>
<td>LGL-773</td>
<td>Legal Term/Process/Ethics/Tort, 1 cr.</td>
<td></td>
<td>Provides an overview of the American judicial system focusing on the origins of American law and the litigation process.</td>
</tr>
<tr>
<td>LGL-774</td>
<td>Legal Documents and Analysis, 1 cr.</td>
<td></td>
<td>Provides an overview of common legal documents. You will prepare sample documents and learn to analyze legal problems.</td>
</tr>
<tr>
<td>LGL-775</td>
<td>Evidence/Legal Interviewing/In, 1 cr.</td>
<td></td>
<td>Provides an overview of how evidence is gathered and used in a civil case.</td>
</tr>
<tr>
<td>LGL-776</td>
<td>Legal Authority and Research, 1 cr.</td>
<td></td>
<td>Provides the student with skills needed to conduct legal research.</td>
</tr>
<tr>
<td>LGL-777</td>
<td>Computers/Legal Writing/Appellate Proced, 1 cr.</td>
<td></td>
<td>This course explains how to use computers to assist in legal research. You will practice your legal writing skills by preparing a sample appellate brief.</td>
</tr>
<tr>
<td>LGL-778</td>
<td>Law Off Admin/Advocacy/Job Hun, 1 cr.</td>
<td></td>
<td>This course provides a look into the paralegal in the law office and presents techniques for finding a job as a paralegal.</td>
</tr>
<tr>
<td>LGL-941</td>
<td>Practicum, 4 cr., 6 cr.</td>
<td></td>
<td>Supervised work experience in a law office, legal services office or other law-related agency.</td>
</tr>
<tr>
<td>LIT-101</td>
<td>Intro to Literature, 3 cr.</td>
<td></td>
<td>Examines literary elements of three major genres of literature: short fiction, poetry, drama and film. Includes both contemporary and traditional works.</td>
</tr>
<tr>
<td>LIT-110</td>
<td>American Lit to Mid-1800’s, 3 cr.</td>
<td></td>
<td>Explores major American writers (including Native Americans) and their contributions to American letters from Puritan times to 1865.</td>
</tr>
<tr>
<td>LIT-111</td>
<td>American Lit Since Mid-1800’s, 3 cr.</td>
<td></td>
<td>Explores major American writers and their contributions to American letters from the post-Civil War era through modern periods.</td>
</tr>
<tr>
<td>LIT-120</td>
<td>American Novel, 3 cr.</td>
<td></td>
<td>A survey of the American Novel with emphasis on 20th century works.</td>
</tr>
<tr>
<td>LIT-124</td>
<td>American Poetry, 3 cr.</td>
<td></td>
<td>Survey of modern American poetry. Examines both the works and lives of 13 of America’s greatest poets.</td>
</tr>
<tr>
<td>LIT-130</td>
<td>African American Literature, 3 cr.</td>
<td></td>
<td>Students will examine the literary, artistic, and sociopolitical traditions of the black experience in America. A variety of fiction and nonfiction works will be analyzed with emphasis on slave narratives, turn of the century political writings, the Harlem Renaissance, the Black Arts Movement, and contemporary cultural texts.</td>
</tr>
<tr>
<td>LIT-133</td>
<td>Minority Voices in U.S. Lit, 3 cr.</td>
<td></td>
<td>An introduction to writers from American minority groups, considered in the social and cultural contexts of the various groups. Includes discussing and writing about various issues.</td>
</tr>
<tr>
<td>LIT-134</td>
<td>Multicultural Literature, 3 cr.</td>
<td></td>
<td>Exploration of a variety of literary types. The cultural and ethnic voices that are in an undeniable part of modern American life. Students read, discuss and critique materials representing a wide range of ethnic, racial and other culturally diverse groups. Emphasis centers on the assessment and appreciation of the strength and values that cultural diversity brings to contemporary American society.</td>
</tr>
<tr>
<td>LIT-141</td>
<td>British Literature II, 3 cr.</td>
<td></td>
<td>This course surveys modern British literature from the Romantic Era to the present with emphasis upon the major authors of the past two centuries. Interpretive, analytical, and critical papers are assigned.</td>
</tr>
<tr>
<td>LIT-150</td>
<td>World Literature I, 3 cr.</td>
<td></td>
<td>Literature from the Ancients, classical Greece and the Renaissance.</td>
</tr>
<tr>
<td>LIT-151</td>
<td>World Literature II, 3 cr.</td>
<td></td>
<td>Literature from the Enlightenment through Romanticism, Realism and Naturalism to Modernism.</td>
</tr>
<tr>
<td>LIT-161</td>
<td>The Short Story, 3 cr.</td>
<td></td>
<td>Evolution of the short story as a literary form, with emphasis on analysis and appreciation.</td>
</tr>
<tr>
<td>LIT-184</td>
<td>Young Adult Literature, 3 cr.</td>
<td></td>
<td>This course is designed to help adults who work with young adults become more familiar with teens and their literature, and select the best literature available based upon criteria and sources that allow for the selection of the best literature for young adults.</td>
</tr>
<tr>
<td>LIT-195</td>
<td>Nature of Evil in Literature, 3 cr.</td>
<td></td>
<td>A study of the social idea of evil as it is reflected in literature through the centuries (from Paradise Lost to the Exorcist). Prerequisite: ENG-105</td>
</tr>
<tr>
<td>LIT-929</td>
<td>Individual Projects, 1 cr.</td>
<td></td>
<td>Independent study or a special project in English.</td>
</tr>
</tbody>
</table>
### Medical Assistant

**MAP-111 Medical Office Mgt I, 3 cr.**
Administrative procedures such as reception techniques, telephone skills, appointment scheduling, mail processing, office equipment operation and maintenance, travel arrangements, insurance forms, and coding will be studied.

**MAP-117 Medical Office Management II, 3 cr.**
Covers private and public insurance types, processing and handling claims, insurance coding and legal precautions in claims processing. Instruction in pegboard accounting, banking procedures and financial record keeping, and records management is an integral part of the course. Prerequisite: MAP-111.

**MAP-128 Automated Medical Office, 2 cr.**
Computer technology and medi-team simulation of an actual medical clinic situation. Recording patient appointments, insurance information, patient medical information and the use of forms for medical office financial transactions.

**MAP-133 Medical Transcription, 3 cr.**
Develops proficiency in the use of dictation and transcription equipment. Medical tapes of actual case histories, consultations, and surgical diagnostic and autopsy reports are used to provide a realistic experience. Application and correct spelling of medical terminology is continuous with the learning process.

**MAP-135 Medical Transcription II, 3 cr.**
This course will be used to further develop proficiency in the use of transcription equipment and software. The student will utilize skills developed within the previous Medical Transcription course. In this course the student will concentrate on seven types of report format used by the AAMT and utilized in medical facilities today. Application, proofreading, as well as anatomy and medical terminology will be utilized and improved during this course.

**MAP-141 Medical Insurance, 3 cr.**
Educates the student in the area of health insurance and billing. Develops an understanding of all health insurance plan options, expansions as well as modifications in state and federal regulations. Instruction will be given in the areas of processing health insurance claims, planning options, carrier requirements, state and federal regulations, abstracting relevant information from source documents, accurately completing claim forms, and coding diagnoses and procedures.

**MAP-233 Medical Laboratory Procedures, 4 cr.**
Laboratory safety measures and familiarization with the care and use of laboratory equipment. Urinalysis techniques including collection, physical examination and microscopic examination of urine specimens. Microbiology classification and the collection and preparation of microbiological specimens.

**MAP-253 Limited Radiology I, 3 cr.**
Provides the foundation principles of physics and radiographic imaging necessary for the practice of limited radiology. Emphasis is on the application of the scientific concepts.

**MAP-254 Limited Radiology II, 4 cr.**
Introduces positioning for the practice of limited radiology. Prerequisite: MAP-253.

**MAP-300 Career Prep Medical Asst, 1 cr.**
Teaches necessary skills for successful resume writing and job interviewing. Prepares medical assistants for their summer practicum with practical application of learned skills. Orientates students to the Practicum experience.

**MAP-342 Clinical Assisting I, 3 cr.**
On-the-job training to provide students with training in medical asepsis; infection control; interviewing and obtaining patient information; vital signs; vision screening; assisting the physician with various physical examinations; instructing patients with physical therapy needs; and performing electrocardiograms.

**MAP-343 Clinical Assisting II, 3 cr.**
Further on-the-job training in aseptic techniques and assisting with minor surgery examinations, including the identification and use of instruments; sterilization and disinfection techniques; sterile dressing application; and cast application and care.

**MAP-402 Medical Law and Ethics, 2 cr.**
This course is designed to provide the student with legal and ethical knowledge to make proper professional judgments. Topics include legal issues pertinent to the medical and chiropractic clinics. Major bioethical and ethical issues are included.

**MAP-453 Medical Assisting Mental Hlth, 2 cr.**
The basic principles of psychology as they apply to the student's personal, social and vocational life.

**MAP-515 Pharmacology, 3 cr.**
Commonly administered drugs, their uses and the effect on the body. Information on correct dosage, methods and routes of drug administration, dosage calculation and the legal and ethical standards for the administration and dispensing of drugs by the physician.

**MAP-543 Human Body in Health & Disease I, 4 cr.**
Anatomical and biological processes of the following systems: structure of cells, tissue, organs, mechanism of disease, integumentary, digestive, respiratory, cardiovascular, lymphatic, hematological, skeletal, muscle. Disease and disorders of the above systems.

**MAP-553 Hum Body in Health & Disease II, 4 cr.**
The course introduces the students to the principles of the anatomical structures and the physiology of the following systems: Blood, heart, circulatory, lymph, respiratory, endocrine, urinary, male and female reproduction and pregnancy, labor and delivery. Efforts are made to offer current medical concepts according to recent research findings and methods and treatments.

**MAP-940 Medical Secretary Practicum, 3 cr.**
On-the-job training in a position related to the student's career goal.

**MAP-941 Practicum, 3 cr.**
On-the-job training in a position related to the student's career goal.

### Mathematics

**MAT-004 Mathematics Foundations, 1 cr.**
Basic mathematics course designed for students in certificate programs.
MAT-005  Math Refresher, 1 cr.
Developmental studies course. Individualized course, which reviews whole numbers, fractions, decimals, percents and ratios.

MAT-050  Math Improvement, 1 cr.
Developmental studies course. This course reviews basic arithmetic and pre-algebra, preparing students for success in college level math courses.

MAT-051  Math Strategies, 2 cr.
Developmental studies course that reviews whole numbers, integers, fractions, decimals, percents, ratios, proportions, and graphing utilizing basic algebra.

MAT-100  Elementary Algebra, 3 cr.
This is a beginning course in algebra. Topics include operations on real numbers and algebraic expressions; solving linear equations and their application; factoring; simplifying fractional expressions; radicals and quadratic equations. Does not count toward the mathematics requirement for the AA or AS degree.

MAT-101  Intermediate Algebra, 3 cr.
This course includes the basic properties of the real number system, fundamental operations on algebraic expressions, graphs of functions and relations, radicals, exponents, quadratic equations, inequalities and complex numbers. Students will learn to use graphic calculators to enhance their understanding. This course does not apply to the Math requirement for the AA or AS degree.

MAT-102  Intermediate Algebra, 4 cr.
This course includes the basic properties of the real number system; fundamental operations on algebraic expressions; graphs and functions and relations; radicals; exponents; quadratic equations; graphing calculators to enhance their understanding. Prerequisite: Appropriate mathematics assessment score. Does not count toward the mathematics requirements for the AA or AS degree.

MAT-110  Math for Liberal Arts, 3 cr.
This is a general survey course which includes sets; number systems; elementary algebra; exponents; equations and inequalities; fractions; ratios; proportion and variation; probability and statistics; elementary graphing; consumer mathematics; and an introduction to geometry.

MAT-117  Math for Elementary Teachers, 3 cr.
Basic mathematical content pertinent to elementary teaching. Topics include problem solving, set theory, number systems and bases, number theory, informal geometry, measurement and elementary probability, and statistics. Does not count toward the mathematics requirement for the AA or A.S. degree.

MAT-120  College Algebra, 3 cr.
Operation of real and complex numbers; factoring; exponents; quadratic equations; inequalities; matrices; rational functions; logarithmic functions; and graphing or functions. Prerequisite: MAT-102 or equivalent.

MAT-121  College Algebra, 4 cr.
Topics include linear functions and inequalities; quadratics; conics; polynomials and rational functions; exponential and logarithmic functions; linear systems; matrices and determinants. Additional topics may include sequences, series, permutations, combinations and probability. Prerequisite: MAT-102 or equivalent.

MAT-127  College Algebra & Trig, 5 cr.
Course combines college algebra and trigonometry. Algebra topics covered include functions and their graphs; solving equations and inequalities; polynomial functions; conic sections; and exponential and logarithmic functions. Trigonometry topics covered are right triangle trigonometry; unit circles; trigonometric functions; graphing; verifying identities; solving trigonometric equations; and applications of trigonometry. Prerequisite: MAT-102 or equivalent.

MAT-130  Trigonometry, 3 cr.
Trigonometric functions and their inverses; verifying identities; right triangle trigonometry; unit circles; radian measure; graphing; trigonometry functions; solving trigonometric equations; and applications of trigonometry. Prerequisite: MAT-102 or equivalent.

MAT-140  Finite Math, 3 cr.
An applied mathematics course dealing with mathematics related to most academic disciplines. It provides introduction to matrices, linear programming, combinations, permutations, statistics, mathematics of finance and logic.

MAT-156  Statistics, 3 cr.
Introductory statistics class stressing data-centered topics rather than the more traditional path from probability to formal inference.

MAT-157  Statistics, 4 cr.
The use of statistics by the methods of descriptive and inferential statistics. Both single and bivariate data are analyzed. Elementary probability and normal probability distributions are studied along with hypothesis testing, linear correlation regression analysis, and analysis of variance. Prerequisite: MAT-102 or 2 years of high school algebra or equivalent.

MAT-210  Calculus I, 4 cr.
Provides the student with a foundation in calculus and analytical geometry. Topics include analytical geometry; differentiation and applications of the derivative; integration and its applications. Graphics calculator is required. Prerequisite: MAT-127 or equivalent.

MAT-211  Calculus I, 5 cr.
A general course in differential and integral calculus and its applications. Topics include limits and continuity; differentiation; application of differentiation; integration; logarithmic, exponential and other transcendental functions; and applications of integration. Prerequisite: MAT-127 or equivalent.

MAT-217  Calculus II, 5 cr.
Continuation of MAT-211. Integration techniques, sequences, infinite series, conic sections, parametric equations, polar coordinates, vectors, cylindrical and spherical coordinates, and vector-values functions. Prerequisite: MAT-211 or equivalent.

MAT-218  Calculus III, 3 cr.
Continuation of MAT-217. Explores functions of several variables; partial derivatives; directional derivatives and gradients; multiple integration; vector analysis; and a brief look at differential equations. Prerequisite: MAT-217 or equivalent.
MAT-225  Differential Equations, 3 cr.
Students learn to recognize various types of differential equations and learn how their solutions behave. Topics include solving first and second order differential equations; applications; systems of equations; series solutions; existence theorems; numerical methods; and partial differential equations.

MAT-770  Applied Math, 2 cr.
Mathematics as it applies to the student’s program of study. A review of whole numbers, fractions, decimals, percentages, the metric system, linear measurement and common formulas used in each particular industry.

MAT-772  Applied Math, 3 cr.
Mathematics applications in automotive mechanics.

MAT-785  Agricultural Math, 2 cr.
Reviews the basic principles of elementary algebra and mathematics as they relate to basic agricultural problems.

Management

MGT-101  Principles of Management, 3 cr.
Introduces modern management background, organization and principles, managerial planning and control policies and procedures of business firms.

MGT-110  Small Business Management, 3 cr.
Practical approach to the study of establishing and operating a small business. Emphasis will be placed on discussion of case situations and on arriving at viable solutions to day-to-day operational problems.

MGT-130  Principles of Supervision, 3 cr.
An overview of the supervisory job. Basics of supervision and management, including effective human relations skills such as communication, motivation, improving performance and leading work teams. Centers on management functions of planning, organizing, controlling and evaluating. Introduction to key supervisory techniques including delegation, appraisal and counseling.

MGT-131  Principles of Supervision, 4 cr.
This course covers the development of supervision as a managerial directing function. Skills and personal traits of the supervisor, motivation and cooperation attitudes as they pertain to both the individual and the group. Coordinating the requirements and needs of employees and management to achieve organizational goals.

MGT-165  Principles of Quality, 3 cr.
Principles and success factors for quality improvement for work group supervisors. Focus on skills and knowledge needed by supervisors to lead quality improvement in their work areas. Quality philosophies, concepts and improvement actions will be highlighted. Programs such as ISO 9000 and the Malcolm Baldrige Award will be discussed. Participants will prepare quality improvement plan for their work groups.

MGT-170  Human Resource Management, 3 cr.
Students will learn each step of the process, including developing a job description; advertising; evaluating resumes; pre-screening candidates; negotiating employment agreements; planning and monitoring orientation programs for new employees; and the importance of up-to-date policies.

MGT-173  Training and Employee Dev, 1 cr.
Training from employee orientation through progressive job training. Determining training objectives, conducting training and evaluating results. How supervisors plan, prepare, conduct, follow up and measure the benefits of work group training.

MGT-178  Employment Law, 3 cr.
Study of the “legalese” of workplace law, covering hiring, firing, promoting, and disciplining employees. Students will learn proper reference checking procedures, sexual harassment issues, equal employment opportunity and affirmative action policies.

MGT-190  Employee Compensation/Benefits Mgmt, 3 cr.
This course focuses on monitoring and organizational benefits such as health, dental, FMLA, wage continuation, workers’ compensation and retirement programs. Students will be introduced to a market survey compensation philosophy and will also learn and practice the tools needed to implement this philosophy. The Manpower Planning Process will also be introduced with discussion of the need and importance of conducting this new survey.

Marketing

MKT-110  Principles of Marketing, 3 cr.
Fundamental principles of the flow of goods and services from producer to consumer, including buying, selling, transportation, storage, finance, advertising and market information as they relate to the marketing structure.

MKT-140  Principles of Selling, 3 cr.
Studies the concepts of selling. Includes an understanding of the customer; realizing the importance of product knowledge; securing and conducting sales presentations, analyzing and handling different types of customers; steps in selling; and the importance of maintaining good will. Personality development and principles of selling are stressed.

MKT-142  Consumer Behavior, 3 cr.
External influences such as culture, social class and family situations; internal influences such as motivation, attitudes, lifestyles and learning; various models of consumer behavior and how consumer behavior fits into marketing strategy.

MKT-150  Principles of Advertising, 3 cr.
Fundamentals and principles of advertising as they pertain to the marketing process. Understanding consumer motivation, identifying the target market, types of media and creation of ads are included.

MKT-155  Visual Merchandising, 4 cr.
The principles and elements of design and their relationship to an effective display. Hands-on experience in creating effective displays and planning a visual merchandising schedule. Students learn about display materials and store layout in relation to effective selling.

MKT-162  Retail Merchandising, 3 cr.
Techniques and procedures used in determining profits, pricing of goods, inventories and merchandise control. Typical problems faced by merchandisers are presented, analyzed and solved.

MKT-171  Retail Buying, 4 cr.
The procedures involved in buying for a retail merchandising business. Emphasis is placed on markets, record keeping, market planning and purchasing of merchandise to cover planned sales, fashion promotions and customer wants, needs and desires.
MKT-290  Professionalism: Dex/Deca, 1 cr.
Introduction to DECA and what the organization has to offer. The course helps the student gain a better understanding of Distributive Education Clubs of America.

MKT-291  Professionalism II: Dex/Deca, 1 cr.
This course helps develop competent professionals in marketing management and merchandising. Delta Epsilon Chi contributes to occupational competence by promoting greater understanding and appreciation for the responsibilities of citizenship in our private enterprise system.

MKT-292  Professionalism III: Dex/Deca, 1 cr.
Continuation of the professional development training in DECA.

MKT-293  Professionalism IV: Dex/Deca, 1 cr.
Continuation of MKT-292 with more opportunities for professional advancement.

MKT-938  On-The-Job Training, 2 cr.
Introductory work experience in the operational phases of the modern retail market. Assignments are tailored to the student’s needs, including basic merchandising, displays, cash register experience and selling to customers. Students are supervised by the coordinator of the program and assigned to work directly under a specific store manager who serves as the on-the-job trainer.

Mass Media Studies

MMS-101  Mass Media, 3 cr.
An introductory course that studies mass media and society. The class includes a historical and contemporary overview of industries, professions, processes and social effects of the mass media.

MMS-105  Audio Production, 3 cr.
Audio production in both radio and television. The main focus is a radio production. Class discussion and lectures focus on coordination of audio board operation and announcing; creating and producing radio commercials; familiarizing the student with the Smartcaster; and following a playlist. Lab exercises help students develop radio control-board skills, production skills, discipline and structure.

MMS-115  TV Studio Production, 3 cr.
Basic operation of a television studio. Students will become familiar with the operation of equipment in the studio (cameras, floor directing, on-camera talent) and control room (directing, the character generator, audio, video). Emphasis will be on practical hands-on elements of studio production.

MMS-130  Video Field Production, 3 cr.
Study of the equipment used in field/remote video productions. Students will participate in several single camera field productions, including shooting, directing and post-producing.

MMS-145  Broadcast Writing, 3 cr.
An instructional workshop for developing the skills to write for audio and video. Students will contribute stories to the college television newscast and possibly supplement the stories with video.

MMS-211  Advanced Video Editing, 3 cr.
This course takes students past the single-source/cuts-only editing system into advanced editing techniques. Students utilize A/B Roll/multiple source systems in addition to computer based editing systems (non-linear).

MMS-225  Advanced Television Production, 3 cr.
Production of pre-scripted programs for the local cable public access station. Students will perform as crew members in various studio productions. Prerequisite: MMS-115.

MMS-230  Advanced Video Production, 3 cr.
Production of advanced single and multi-camera productions. Focus on producing field programs outside the studio environment for the local cable public access channel. Programs will include college and community activities such as city council meetings.

MMS-234  Radio Workshop, 4 cr.
Radio station operations and practices in the college radio station. The majority of the programming and performance of the station will be the responsibility of students in this course. Prerequisite: MMS-105.

MMS-241  Public Relations & Marketing, 3 cr.
Public relations methods used for effectiveness and the art of persuasion throughout the organization of corporate communications.

MMS-298  Portfolio Preparation, 0 cr.
The portfolio consists of the student’s traditional copy resume, audio demotape and video resume tape prepared for job application requests.

MMS-299  Sophomore Portfolio, 0 cr.
A portfolio completed by each candidate for graduation in the Broadcast Media Specialist program will include a resume, resume videotape and/or audio demo tape. Materials are prepared and completed as if the student is applying for a job in the television or radio industry.

MMS-928  Independent Study, 1 cr.
Independent study or a special project in broadcasting.

MMS-941  Practicum, 2 cr.
Students accumulate 140 or more hours of work-related experience at broadcasting institutions or other approved facilities. Students gain specific skills in a practical job setting.

Motorcycle Technology

MOT-128  Motorcycle Engine 2&4 Stroke, 2 cr.
Construction and design of motorcycle engines, both two- and four-stroke. Correct service procedures, troubleshooting, failure analysis and advanced theory are included. Prerequisite: first semester of program.

MOT-129  Motorcycle Eng 2&4 Stroke Lab, 2 cr.
Engine disassembly, reassembly, operation of various motorcycle and ATV engines. Includes adjustment and testing of engines. Prerequisite: First semester of program. Co-requisite: MOT-128.
MOT-139 Motorcycle Fuel Systems, 3 cr.
Motorcycle fuel systems including carburetion, fuel injection and oil injection. Troubleshooting, testing, adjustments and disassembly/reassembly are covered. Proper service procedures are discussed, demonstrated and practiced. Lecture and laboratory. Prerequisite: first two semesters of program.

MOT-143 Drive Systems/Chassis/Suspension, 3 cr.
Theory and operation of Motorcycle Drive Systems, chassis, and suspension. Disassembly, inspection, reassembly, troubleshooting, adjustment and repair. Lecture and lab.

MOT-146 Ignition/Electrical Systems, 3 cr.
Study of the construction, principles of operation and design of motorcycle ignition and electrical systems.

MOT-200 Motorcycle/ATV Tune Up/Maintenance, 2 cr.
This course includes tune up procedures for both 2 and 4 stroke Motorcycle and ATV’s.

MOT-202 ATV Systems, 3 cr.
Introduction to ATV’s and all of their systems.

MOT-210 Adv Driveability & Troubleshooting, 3 cr.
This course will better prepare the student for the real life driveability and troubleshooting problems that they will encounter in the field.

MOT-220 Advanced Electrical Diagnosis/ Troubleshoot, 3 cr.
Advanced electrical diagnosis and troubleshooting as it pertains to the Motorcycle and Small Engine Industry.

MOT-230 Advanced Fuel Systems, 3 cr.
Advanced fuel system diagnosis, troubleshooting, and tuning.

MOT-240 Dyno Analysis, 2 cr.
This course includes Dyno usage, data analysis, and tuning.

MOT-250 Outdoor Power Equipment, 3 cr.
An introduction to Outdoor Power Equipment.

MOT-255 Performance Engine Tuning, 2 cr.
Performance Engine Tuning as it applies to the Motorcycle and ATV.

MOT-260 Shop Management, 3 cr.
Shop Management as it applies to the Motorcycle and Small Engine Industry.

MOT-270 Introduction to Diesel, 2 cr.
A study of the basic diesel engine used in small horsepower applications. Diesel fuel systems, turbo charging, diesel engine maintenance, and troubleshooting.

MOT-275 Introduction to Hydraulics, 2 cr.
A study of the many hydraulic systems and components used on modern equipment. Emphasis is placed on hydraulic theory and system analysis.

MOT-910 Cooperative Work Experience, 4 cr.
Student is involved in a supervised cooperative work experience in a dealership.

MOT-932 Internship, 2 cr.
On-the-job experience at a motorcycle repair facility as a technician, part and service person, or salesperson. The student is evaluated by the job supervisor and the instructor. Prerequisite: completion of the first year of the program.

Marine Service Technology

MSE-143 Small Engines Theory, 3 cr.
Basic two- and four-stroke engine theory, design and construction. All basic systems are studied, as well as troubleshooting, failure analysis and repair procedures. Service literature, warranties and engine identification are covered.

MSE-146 Small Engines Laboratory, 3 cr.
Complete disassembly and reassembly of modern engines, troubleshooting, failure analysis and proper repair techniques. Hands-on testing and inspection of engine systems. Corequisite: MSE-143.

MSE-147 Introduction to Marine Service, 2 cr.
This course will cover basic system operations of boats and off season storage, including how to properly operate a boat, dock and tie up a boat, the purpose of instrument gauges and accessories, marine industry terminology and how to identify various serial numbers. Considerable practice will be provided in properly winterizing boats and personal watercraft for off season storage.

MSE-148 Introduction to Detail, 1 cr.
This course will cover basic detailing of boats and personal watercraft, to include removal of mild oxidation; wax build up and fine scratches, how to properly restore optimum gloss, especially on dark colors, and how to provide long lasting protection from harmful UV rays. You will additionally learn how to clean and protect teakwood. This course provides practice in basic correct use of a buffer, detail cleaners, waxes, polishes and protectants, how to identify specific problems and possible solutions.

MSE-149 Introduction to Marine Rigging, 2 cr.
This course will cover basic rigging operation of boats and personal watercraft, including how to properly install motors and all necessary wiring, how to properly determine what motor should be installed and how to install gauges, depth finders, stereos and other equipment. The course will also include trailer set up procedures, the purpose of instrument gauges and accessories on boats. Factory service manuals, electronic and paper, will be used to look up parts as you learn marine industry terminology and how to identify various serial numbers on motors.

MSE-150 Shop Management, 3 cr.
In this course, students learn proper shop management procedures including parts ordering, inventory, repair order writing, payroll, employee-employer relations, customer relations and communication skills, sales and service in the service center, warranty procedures on marine products, computerized parts/billing systems and waste management procedures.

MSE-151 Shop Safety and Procedures, 1 cr.
Safe shop practices and procedures, including safe equipment operation, proper tool usage, importance of personal protective gear and how to handle emergency situations.
MSE-152 Dr System Fundamentals, 2 cr.
Introduction to the various types of drives which may be encountered. Construction, operation, maintenance and repair of outdoor power and other systems including transmissions; clutches; belt drives; sprockets and chain drives; and hydrostatic drives. Assembly, disassembly, inspection, troubleshooting and repair of these systems is covered. Lecture and laboratory.

MSE-153 Fundamentals of Electricity, 3 cr.
Basic electrical theory used in the small engine and marine field. Study of Ohm’s Law, electrical symbols, problem solving, types of circuits, usage of a VOM and other electrical test equipment. Lecture and laboratory.

MSE-158 Snowmobile Systems, 2 cr.
Snowmobile systems including clutches, suspensions, engines, tracks and other components are studied. Proper service techniques, troubleshooting, assembly and disassembly are covered along with a unit on performance work. Lecture and laboratory.

MSE-164 Marine Engine 2 & 4 Stroke, 2 cr.
Construction and design of two- and four-stroke marine engines. Correct service procedures, troubleshooting, failure analysis and advanced theory are covered. Prerequisite: first semester of program.

MSE-165 Marine Engine 2 & 4 Stroke Lab, 2 cr.
Corresponding lab to Marine Engines Two and Four Stroke Theory. Hands-on testing and inspection of marine engines.

MSE-169 Marine Dr Systems T/L, 3 cr.
This course covers operation and construction of Marine Sterndrives, Inboard Drive Systems and Outboard Gear Cases. Also covered will be disassembly, assembly, inspection, troubleshooting, failure analysis, identification, rebuilding drives, adjustments procedures, advance theory and repair procedures as well as performance testing and propeller theory.

MSE-173 Marine Fuel Systems, 3 cr.
Marine fuel systems including carburetion, fuel injection and oil injection are studied. Troubleshooting, testing, adjustments, assembly and disassembly are practiced. Proper service procedures discussed and demonstrated. Lecture and laboratory. Prerequisites: first two semesters of program.

MSE-183 Personal Water Craft Systems, 3 cr.
Theory and hands-on lab for all systems in personal watercraft including jet pumps, engines and steering systems. Repair, troubleshooting and service procedures are covered. Lecture and laboratory. Prerequisite: first two semesters of program.

MSE-189 Marine Electrical Systems T/L, 3 cr.
This course will cover the principles of operation and construction of various components in the electrical systems of a Boat such as Ignition Systems, Starting Systems, Charging Systems, Tilt and Trim Systems, along with other accessories used in the Marine industry. Proper testing, troubleshooting, disassembly/reassembly, and installation of electrical components are also covered.

MSE-252 Marine Advanced Driveability, 3 cr.
In this course students learn how to diagnose different fuel injection systems & their problems as well as know the difference between fuel systems. Students will be able to analyze these fuel systems along with using the latest test equipment. Each student will be able to understand and explain how these systems work. You will also learn how to use failure evaluating procedures.

MSE-273 Marine Advanced Fuel Systems, 3 cr.
In this course, students learn how to repair a wide variety of advanced fuel systems, for example, throttle body fuel injection, multiport fuel injection systems and direct injected fuel systems. Students practice how to properly test these systems and how to diagnose each one.

MSE-286 Marine Advanced Electrical, 3 cr.
In this course, students learn how to analyze electrical problems and procedures. Students understand how to go about troubleshooting different electrical problems such as ignition, hard starting, low speed engine miss, engine miss firing and engine running rough. Students will also evaluate engine running problems with different computer scanners and be able to apply these skills when they complete this course.

MSE-932 Internship, 4 cr.
On-the-job experience at a marine or small engine repair facility as a technician, part and service person, or salesperson. The student is evaluated by the job supervisor and the instructor. Prerequisite: completion of first year of program.

Massage Therapy

MST-101 Health and Wellness, 1 cr.
This course will provide self care techniques to promote wellness for the Massage Therapist profession.

MST-103 Intro to Swedish Massage, 3 cr.
Provides a basic foundation for the courses of study in the Massage Therapy program.

MST-110 Pathology for Massage Therapy, 2 cr.
This course is the study of the nature and causes of disease as related to structure and functions of the body. The massage therapist focus is on maintaining health or a balanced state of physical, emotional, social well being called homeostasis. The students will be introduced to basic pharmacology terminology with prescriptions medications, recreational drugs, herbs and natural supplements.

MST-113 Kinesiology/Anatomy in Clay, 3 cr.
The study of the muscles of the body and their actions, origins, and insertion sites. The course will entail the building of major muscle groups of the body in clay and placing them on the correct site of the anatomical skeleton.

MST-121 Reflexology, 1 cr.
This course includes the modality pertaining to zones and reflex areas in the hands and feet. The students will study how the reflexes corresponds to distinct parts of the body.

MST-123 Sport Massage, 3 cr.
This course provides the skills and techniques to be used with athletes and individuals with sport injuries. Includes an introduction to acupuncture.
**MST-139 Spa Bodywork, 2 cr.**
This course will provide the skills and techniques to be used with hydrotherapy, hot stone therapy, aromatherapy, and spa therapy. The student will be introduced to the terminology of Asian, Eastern, and Traditional Methods and Bodywork. Students will be able to recognize and locate the major meridians, understand the general characteristics of the five elements, learn the names and qualities of the seven major chakras and recognize the qualities of the three Doshas.

**MST-141 Geriatric Massage, 1 cr.**
This course will provide the skills and techniques to use with elderly clients.

**MST-143 Intermediate Massage, 3 cr.**
This course is designed to expand on skills developed in the course Introduction to Swedish Massage. Students will pair up and the classes will consist of hands on applications of body massage techniques.

**MST-149 Pregnancy/Infant Massage, 1 cr.**
This course will provide the skills and techniques to use with the pregnant and infant clients.

**MST-151 Business - Massage Therapy, 1 cr.**
An introduction to business practices for the massage therapist as an independent and as an employee. Students will be introduced to business structures and organizations, business plans, bookkeeping, legal records, marketing, professional insurance, financing, and business law. Application of principles of stress reduction and time management will be discussed.

**MST-152 Chair Massage, 1 cr.**
The course provides professional massage techniques of the head, neck, shoulders, arms, back and hips of a client seated in a special designed chair for massage. The student will be trained to do a highly visible branch of professional massage, which is done in shopping malls, airports, convention centers, supermarkets, and the workplace.

**MST-153 Deep Tissue Massage, 3 cr.**
This course is designed to expand on skills developed in the Introduction to Swedish Massage and Intermediate Massage. Students will incorporate all massage techniques learned in the past.

**MST-159 Ethics - Massage Therapy, 1 cr.**
This course assists students to understand and apply the Standards of Practice established by professional massage organizations. The course emphasizes ethical behavior in the massage therapy profession and teaches students to establish professional boundaries and acceptable standards of documentation.

**MST-810 Massage Clinic, 1 cr.**
This course is designed for classroom lab supervised practical experiences in body massages application. The students will set up appointments for outside individuals to apply techniques for full body massages.

**Music-Applied**

**MUA-101 Applied Voice, 1 cr.**
Private applied instruction that provides students the opportunity to develop and refine performing skills.
General Music

MUS-100 Music Appreciation, 3 cr.
Studies the elements and history of music with concentration on critical listening skills. Includes a review of music history; styles; genres; form and content; schools of composers; and social and historical events of the past and present that influence music selections.

MUS-120 Music Theory I, 3 cr.
Studies the fundamental principles of traditional theory including melody, rhythm and harmony. Key signatures, intervals and triads are also included. This is an entry level course for music majors.

MUS-121 Music Theory II, 3 cr.
Continuation of MUS120 which includes diatonic material, cadences, chord progression, inversions, chord spelling and part writing.

MUS-135 Music Theory Lab I, 1 cr.
Introduces the solfeggio system of music reading. Both tonal and rhythmic patterns are included in the sight reading exercises as well as principles of key relationships, intervals and triads.

MUS-136 Music Theory Lab II, 1 cr.
Continuation of principles of key relationships, intervals, triads and improvement of sight reading musical notation. All aspects of rhythmic and melodic structure are studied and practiced.

MUS-140 Concert Choir, 0 cr.
Provides an opportunity for talented singers to rehearse and perform choral music of many styles. There is no required audition.

MUS-145 Concert Band, 1 cr.
A music ensemble which studies, rehearses and performs literature for bands and wind ensembles. There is no required auditions.

MUS-151 Pop Singers, 1 cr.
Pop Singers are the college show choir. This group provides an opportunity for talented singers to perform choral music with choreography. Auditions are held at the beginning of the fall and spring semesters.

MUS-153 Jazz Singers, 0 cr.
Jazz Singers are the college vocal jazz choir. This group provides an opportunity for talented singers to perform close harmonies of vocal jazz repertoire. Auditions are held at the beginning of the fall and spring semesters.

MUS-155 Men’s Chorus, 0 cr.
Rehearsal and performance of selected men’s chorus selections with concerts and special occasion performances. Open auditions. May be repeated for credit.

MUS-156 Women’s Chorus, 1 cr.
Rehearsal and performance of selected women’s chorus selections with concerts and special occasion performances. Open auditions. May be repeated for credit.

MUS-166 Jazz Combo Improvisation, 1 cr.
Techniques of improvisation through rehearsal and performance of jazz literature through the jazz combo or small group ensemble.

MUS-170 Jazz Band, 0 cr.
Rehearsal and performance of jazz literature, with an annual tour, concerts and special occasion performances. Open auditions.

MUS-175 Woodwind Ensemble, 0-1 cr.
Rehearsal and performance of selected woodwind ensemble works with concerts and special occasion performances. Open auditions. May be repeated for credit.

MUS-176 Brass Ensemble, 0 cr.
Rehearsal and performance of selected brass ensemble works with concerts and special occasion performances. Open auditions. May be repeated for credit.

MUS-177 Percussion Ensemble, 0 cr.
Rehearsal and performance of selected percussion works with concerts and special occasion performances. Open auditions. May be repeated for credit.

MUS-178 Handbell Ringers, 0 cr.
Ensemble rehearsal of a wide variety of handbell music and study of the techniques of proper handbell ringing. Auditions are held at the beginning of the fall and spring semesters.

MUS-187 Percussion Methods, 2 cr.
The pedagogy relevant to the elementary, beginning and intermediate student/musician studying the percussion instruments (drums and mallets).

MUS-190 Jazz Improvisation, 1 cr.
Teaches improvisation through various musical styles through combo or small group ensemble. Teaches students the art of instant composition.

MUS-200 Music History I, 3 cr.
A survey of Western music literature through perceptive listening of significant forms and styles of music of Western civilization, from antiquity to the mid 18th century. Emphasis on the compositional and stylistic evolution of Western Music as evidence in the works of selected pivotal composers. Recommended pre-requisites: Music Appreciation or Music Theory I.

MUS-201 Music History II, 3 cr.
A survey of Western music. Emphasis on the compositional and stylistic evolution of Western music as evidenced in the works of selected pivotal composers.

MUS-205 Jazz History & Appreciation, 3 cr.
Studies the elements and history of jazz music with concentration on critical listening skills. Includes a review of jazz history; styles, genres, form and content, composers, and social and historical events of the past and present that influence music selections.

MUS-220 Music Theory III, 3 cr.
Continuation of MUS-121 including the study of advanced triadic structure and synthetic scales. Emphasis on analysis.

MUS-221 Music Theory IV, 3 cr.
Continuation of MUS-221.
MUS-235  Music Theory Lab III, 1 cr.
Continuation of principles of key relationships, intervals, triads and improvement of sight reading musical notation. All aspects of rhythmic and melodic structure are studied and practiced. Prerequisite: MUS-136.

MUS-236  Music Theory Lab IV, 1 cr.
Continuation of principles of key relationships, intervals, triads and improvement of sight reading musical notation. All aspects of rhythmic and melodic structure are studied and practiced. Prerequisite: MUS-235.

MUS-250  Musical Play Production, 1 cr.
Production of a musical play. Special attention will be given to singing, acting, set work, props, sound reinforcement and lighting. Open auditions.

Computer Networking

NET-122  Computer Hardware Basics, 3 cr.
How to prepare and evaluate system specifications, troubleshoot minor hardware problems, configure and install hardware, manage memory, modify and use diagnostic software.

NET-140  Networking Essentials, 4 cr.
Foundational training in local area networking technology serving as a general introduction to LANs, WANs and the Internet. Topics include IQRs, network interface cards (NIC), cabling (coax, STP, UTP and fiber), ARCNET, network protocols, hubs, routers and bridges.

NET-142  Network Essentials, 3 cr.
Network Essentials introduces the networking field. The course focuses on network terminology and protocols, local area networks (LAN), wide-area networks (WANs), Open System Interconnect (OSI) models cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. Instruction and training are provided in the proper care, maintenance, and use of networking software tools, and equipment and all local, state, and federal safety, building, and environmental codes and regulations.(3/0)

NET-212  Cisco Networking, 3 cr.
Designing, building and maintaining computer networks. CISCO Networking Academy program.

NET-222  Cisco Routers, 3 cr.
Designing, building and maintaining computer networks. CISCO Networking Academy program can lead to CCNA certification, Prerequisite: NET-212.

NET-232  Cisco Switches, 3 cr.
Designing, building and maintaining computer networks. Cisco Networking Academy program can lead to CCNA certification, Prerequisites: NET-212 and NET-222.

NET-242  Cisco Wide Area Networks (wan), 3 cr.
Designing, building and maintaining computer networks. Cisco Networking Academy program; can lead to CCNA certification, Prerequisites: NET-212, NET-222, NET-232.

NET-304  Windows Workstation Operating Systems, 4 cr.
Installing, configuring and administering Microsoft Windows 2000 Professional.

NET-314  Windows Server, 4 cr.
Installing, configuring and administering Microsoft Windows 2000.

NET-330  Windows 2003 Networking, 4 cr.
How to support the various features of the Microsoft Information Server (IIS). Students will learn how to install, configure and implement all components that comprise IIS. Hands-on experience in setting up a web site is included.

NET-331  Win 2000 Networking Infrastructure, 4 cr.
Implementing and administering a Microsoft Windows 2000 Directory Network infrastructure.

NET-334  Implement Windows Network Infra., 4 cr.
Targeted towards IT professionals who implement, manage, and troubleshoot existing network and server environments based on the Microsoft Windows 2000 operating system. It helps students prepare for MS exam #70-218 which is a core requirement of the Microsoft Certified Systems Administrator certification.

NET-340  Win 2000 Active Directory, 4 cr.
Implementing and Administering a Microsoft Windows 2000 Directory Services Infrastructure.

NET-354  Windows Security, 4 cr.

Designing a Microsoft Windows 2000 Directory Services infrastructure.

NET-374  Design Windows Network Infrastructure, 4 cr.
Designing a Microsoft Windows 2000 Network infrastructure.

NET-620  Internet Security Accelerator, 4 cr.

NET-621  Designing Security, 4 cr.

NET-653  Microsoft Exchange Server, 4 cr.
Designed to simulate the day-to-day activities and responsibilities of a Microsoft Exchange Administration, the student will learn the main functions of the Microsoft Exchange server and how to plan and install Microsoft Exchange in a single-site environment. Multi-site environments will also be reviewed.
Physical Education Activities

PEA-106 Archery I, 1 cr.
Lecture and laboratory course designed to cover the rules, history, strategy and skill techniques of archery and provide students time to practice as well as test their skill level and knowledge of the activity.

PEA-117 Bowling I, 1 cr.
Lecture and laboratory course designed to cover the basic principles and skill techniques involved in bowling.

PEA-123 Circuit Training, 1 cr.
This course is designed to cover the principles and skill techniques involved in circuit training. Alternating between resistance training, cardiovascular and flexibility exercises allows for simultaneous improvement in muscular strength and endurance as well as flexibility.

PEA-125 Indoor Cycling I, 1 cr.
This course is an indoor cycling aerobics class. This course introduces students to a low-impact, cardiovascular workout using stationary bicycles to improve current health and fitness levels.

PEA-130 Downhill Skiing I, 1 cr.
Designed to give the student the opportunity to enjoy downhill skiing, including academic theory and laboratory activities.

PEA-134 Golf I, 1 cr.
Lecture and laboratory course designed to cover the basic principles and skill techniques involved in golf.

PEA-137 Lifeguard Training I, 1 cr.
Explanation, demonstration, practice and review of skills required of lifeguards. American Red Cross certification is an option.

PEA-143 Physical Conditioning I, 1 cr.
This is an introductory course designed to provide the physical fitness basic skills to assist students in their preparation for the minimum physical fitness requirements in Criminal Justice field.

PEA-146 Phys. Fitness I, 1 cr.
Develops an individual wellness program with emphasis on cardiovascular and muscular fitness and provides the student with periodic fitness evaluations.

PEA-158 Scuba Diving I, 1 cr.
Basics for certification. Includes snorkeling, ascents and descents, breathing, decompression tables. NAUI certification is an option.

PEA-164 Swimming I, 1 cr.
Introductory course covering front crawl, back crawl, elementary backstroke, sidestroke, and breaststroke.

PEA-174 Tennis I, 1 cr.
Lecture and laboratory course designed to cover the rules, history, strategy and skill techniques of tennis and provide students time to practice as well as test their skill and knowledge of the activity.
Course provides a knowledge and understanding of the prevention, care and rehabilitation of athletic injuries. Evaluation of protective devices, nutrition and conditioning are included.

PEC-160 Sports Officiating, 2 cr.
Principles and standards, rules, mechanics and procedures for officiating competitive sports.

General Physical Education and Health

PEH-102 Health, 3 cr.
Study of the physical, mental and social dynamics of health with attention to the development of wholesome attitudes and living habits. Students learn basic information, making choices, and application of steps toward establishing a healthier lifestyle.

PEH-141 First Aid, 2 cr.
Basic lifesaving techniques as outlined by the American Red Cross and CPR as outlined by the American Heart Association.

PEH-142 First Aid, 3 cr.
Course designed to teach basic lifesaving techniques, as outlined by the American Red Cross and CPR, as outlined by the American Heart Association.

PEH-161 Intro Phys Ed, 2 cr.
Introduction to the field of physical education with an overview of the aims, objectives, foundations, philosophies, history and basic concepts of organization and administration.

PEH-225 Healthy Lifestyles Management, 3 cr.
Living a healthy lifestyle, a basic overview of fitness activities, the health benefits of fitness activities, nutrition and stress. Each unit contains basic information, choices and application toward establishing a healthier lifestyle.

PEH-230 Coping With Stress, 3 cr.
Introduction to stress and stress management. The emotional and physical basis of stress, effects of stress, coping strategies and stressors during childhood, adolescence and adulthood.

Physical Education Training

PET-105 Basic Athletic Training, 3 cr.
Introduction to the history and development of athletic training as a medical profession. Introduction to methods of athletic training including injury recognition, the prevention and care of athletic injuries and emergency care are studied. Competencies in taping and wrapping techniques are included.

PET-110 Intro to Athletic Training, 2 cr.
The history and development of athletic training as a medical profession. Introduction to injury recognition, prevention of athletic injuries, lab techniques and therapeutic modalities utilized in athletic training.

PET-120 Biomechanics, 3 cr.
The kinetic and kinematic principles of human movement and the application of this movement to physical education, athletics and injury rehabilitation.

PET-130 Athletic Training Techniques, 2 cr.
Introduction to the basic clinical skills of the student athletic trainer as well as the policies and procedures pertaining to the discipline of athletic training. Skills are taught from each domain of athletic training.
PET-140 Athletic Training Experience, 1 cr.
Supervised athletic event and practice coverage as an athletic trainer.

PET-150 Athletic Training Experience II, 1 cr.
Supervised athletic event and practices coverage as an athletic trainer.

PET-171 Athletic Training Experience III, 1 cr.
Continuation course for students planning to transfer to an accredited institution for athletic training education. Course is based in the athletic training room where the student continues to complete more advanced competencies.

PET-181 Athletic Training Experience IV, 1 cr.
Exposure to the general working conditions of the Certified Athletic Trainer. Experiences will include a variety of locations and exposure to sports medicine information management and administrative duties of the Athletic Trainer. Course will include an immersion period with a single sport and responsibilities specific to that sport.

Intercollegiate Physical Education

PEV-110 Varsity Baseball, Fall, 1 cr.
Study of basic and advanced fundamentals.

PEV-115 Varsity Baseball, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate baseball.

PEV-121 Varsity Basketball, Men, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate basketball.

PEV-122 Varsity Basketball, Women, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate basketball.

PEV-140 Varsity Golf, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate golf.

PEV-160 Varsity Softball, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate softball.

PEV-170 Varsity Volleyball, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate volleyball.

PEV-210 Var. Baseball II, Fall, 1 cr.
Study of basic and advanced fundamentals.

PEV-215 Varsity Baseball II, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate baseball.

PEV-221 Varsity Basketball II, Men, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate basketball.

PEV-222 Varsity Basketball, Women, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate basketball.

PEV-240 Varsity Golf II, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate golf.

PEV-260 Varsity Softball II, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate softball.

PEV-270 Varsity Volleyball II, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate volleyball.

PEV-900 Field Trip, 0 cr.
Supplemental enrichment courses related to the Social Sciences which includes special projects. P/Q grading.

Philosophy

PHI-101 Intro to Philosophy, 3 cr.
Considers broad fundamental ideas about knowledge, the nature of reality, human nature and society. It is also concerned with words and concepts, their meaning and their logical relationship to each other.

PHI-105 Intro to Ethics, 3 cr.
This introductory course examines contemporary ethical conflicts and provides an understanding of the language, concepts and traditions of ethics.

PHI-142 Ethics in Business, 3 cr.
Ethics in Business addresses moral issues that confront the contemporary business community. Traditional ethical systems provide a framework with which to analyze issues in areas of corporate responsibility and the rights and obligations of employers and employees.

Pharmacy Technology

PHR-107 Pharmacy Technology I, 7 cr.
Foundation knowledge required for a pharmacy technician is taught in this course. Topics covered include an orientation to the pharmacy technician career, pharmacy law and ethics, relevant medical and pharmaceutical terminology, and pharmaceutical calculations.

PHR-117 Pharmacy Technician II, 7 cr.
The second pharmacy technician core course includes the study of pharmacology, learning how to communicate effectively with clients and co-workers, and insurance filing and inventory procedures. Brief clinical rotations in a hospital and a retail pharmacy are required.

PHR-121 Pharmacy Technician Seminar, 1 cr.
A capstone course to prepare students for entering the job market and for the certification exam.

PHR-941 Practicum, 3 cr.
On the job training under the supervision of a registered pharmacist.

Physical Science

PHS-113 Intro to Physical Science, 4 cr.
A survey of the basic concepts of astronomy and physics, recommended for students who have not had high school physics. Lecture, demonstration and laboratory.
PHS-142 Principles of Astronomy, 3 cr.
Studies the latest astronomical discoveries and astrophysical theories.

PHS-166 Meteorology Weather Climate, 4 cr.
Introduction to meteorological concepts with emphasis on the characteristics and composition of the atmosphere, weather observations, atmospheric stability and circulation, atmospheric storms, climatology and meteorological applications. Lecture and laboratory.

PHS-185 Intro to Earth Science, 3 cr.
Surveys the basic concepts of chemistry, geology and meteorology. Same as the lecture portion of PHS-187.

PHS-187 Intro to Earth Science, 4 cr.
Surveys the basic concepts of chemistry, geology and meteorology. This course is recommended for students who have not had high school chemistry. Lecture, demonstrations and laboratory.

Physics

PHY-162 College Physics I, 4 cr.
Demonstrations, lectures, recitations and laboratory work beginning a two semester sequence covering the subject. Mechanics is primarily covered during the first semester. Recommended for pre-medical, dental, pharmacy and for liberal arts student interested in the sciences. Prerequisite: An elementary understanding of algebra, trigonometry and geometry from high school study.

PHY-172 College Physics II, 4 cr.
Continuation of PHY-162. Thermodynamics, electricity and magnetism are covered in this semester. Lecture and laboratory. Prerequisite: PHY-162.

PHY-212 Classical Physics I, 5 cr.
Demonstrations, lectures recitations and laboratory work beginning a two-semester sequence covering the subject. Mechanics is primarily covered in the first semester. Recommended for those planning to major in engineering, physics, chemistry and mathematics. Prerequisite: Concurrent enrollment or previous course in calculus.

PHY-222 Classical Physics II, 5 cr.
Continuation of PHY-222. Thermodynamics and electricity and magnetism are covered in this course. Lecture and laboratory.

Practical Nursing

PNN-101 Mathematics for Health Profess, 1 cr.
The course emphasizes basic math skills and calculation of drugs and solutions, as well as their use in healthcare settings.

PNN-108 Survival Spanish for Nursing, 2 cr.
This course is designed to provide non-Spanish-speaking nursing students and practitioners with functional skills in Spanish. Spanish phrases, commands, and questions practical to daily nursing duties are covered. No prior knowledge of Spanish necessary.

PNN-141 Fund of Nursing Skills Lab, 4 cr.
This course introduces the beginning student to the caring nature of nursing, the development of the nurse-client relationship, principles of therapeutic communication and cultural diversity of clients. Historical, ethical, and legal principles related to the nursing profession are discussed. The nursing process is introduced with an emphasis on assessment, nursing diagnoses and nursing interventions utilizing standardized nursing language. The steps of the nursing process are presented as the framework for determining and meeting client needs within the scope of practice of the practical nurse. In addition, the student acquires knowledge regarding the action, effect, side effects and nursing implications of the major drug classifications and develops safe techniques of drug administration.

PNN-271 Normal Nutrition, 1 cr.
An exploration of current issues related to nutrition including the Dietary Guidelines, the Food Pyramid and new labeling standards. Additional topics include nutrition through the life cycle, religious and cultural aspects of nutrition, and weight control and exercise.

PNN-275 Normal Nutrition, 3 cr.
Provides the student with a basic background of the nutrients essential to maintain the physical and mental well-being of the human body.

PNN-345 Dimensions in Practical Nursing, 2 cr.
In this final course of the PN curriculum principles of career planning and job-seeking are covered. The responsibilities of the nurse as a team and community member, interpersonal communication skills and the ethical and legal aspects of nursing are also addressed. The services and functions of the national, state, and local health organization and agencies are explored.

PNN-421 Maternal & Newborn Nursing, 2 cr.
This course is a study of normal pregnancy and childbearing as it occurs within the family structure. Nursing care during normal pregnancy, birth and postpartum period are discussed with an emphasis on the nursing process. Common maternal and newborn complications are included.

PNN-631 Adult & Child Health Nursing, 9 cr.
This course emphasizes the role of the practical nurse in the care of adult and pediatric clients. It includes a study of the body’s adaptation to the common stressors in health and illness. Discussion includes medical and nursing management of specific disorders and conditions requiring surgical intervention. In addition, common disorders of the child from infancy through adolescence are discussed with an emphasis on growth and development.

PNN-632 Nursing Care-Lifespan Clinical, 3 cr.
This course enables the student to practice the basic knowledge and skills necessary to meet the nursing care needs of culturally diverse individuals throughout their lifespan. The student will care for clients on the obstetrics and the medical-surgical units. An introduction to the care of the client in the operating and recovery room will be gained through an observational experience. Ancillary services such as diet therapy, respiratory therapy, physical therapy, x-ray and the laboratory are observed in relation to how they relate to specific client conditions. In addition, the student will explore the role of the nurse and utilization of the nursing process in the long term care setting.
Political Science

POL-110 Intro Political Science, 3 cr.
A general introductory course in the fundamental concepts, institutions, principles and procedures of political science. Background in classical political theory through exposure to ideas of past political philosophers (such as Aristotle, Machiavelli, Hobbes, Locke, Marx and others). Studies comparative systems through consideration of governments of Great Britain, France and Canada.

POL-111 American National Government, 3 cr.
Review of basic fundamentals of government including federalism, the political process, the presidency, the congress and the judicial system.

POL-112 American State & Local Government, 3 cr.
Course examines the principles and practices of American state and local government as well as applications and case studies in each area.

POL-121 International Relations, 3 cr.
Study of elements of national power and the formulation of foreign policy. Examination of national, state and international politics from 1871 to the present, including international organization, law and future prospects.

POL-125 Comparative Politics & Government, 3 cr.
Survey of the methods, ideologies and main ideas in the field of comparative politics. Introduction to comparative research. Study and comparison of governments and institutions across nation-states.

POL-135 World Politics, 3 cr.
The study of international politics and the interaction between state and non-state actions, with emphasis on those elements underlying the international political system.

POL-201 The United States Constitution, 3 cr.
This course focuses on the historical evolution of the United States Constitution with emphasis on its antecedents, interpretation and change. Topics include a study of the Constitution’s historical background and its basic features, a study of the seven articles, the twenty-six amendments and examination of current topics.

POL-213 Critical Thinking for Contemporary Society, 3 cr.
Through study of the process of thinking and the response to current affairs, consider many of the personal, economic and social issues affecting personal and civic responsibility in today’s global environment.

Psychology

PSY-111 Intro to Psychology, 3 cr.
A survey course which provides an introduction to the study of psychology with emphasis on the history of psychology, learning, personality, behavior, motivation, perception, psychological disorders and their treatment, and social psychology as well as other areas.

PSY-121 Developmental Psychology, 3 cr.
Studies human development from conception through the lifespan. Physical, emotional, social, cognitive and moral aspects are studied in the classroom, by lecture, file/video, projects, observation and by reading the literature.

PSY-211 Psychology of Adjustment, 3 cr.
Increases student's knowledge and experiences relating to various populations with disabilities. Adjustment to physical and/or mental disability, conflicting treatment models, impact on self, family, community and society are examined.

PSY-222 Child Psychology, 3 cr.
Covers development from conception to childhood. Emphasis is on child study, growth and development of physiological, motor personality, mental and emotional aspects, sensory and behavior development. Prerequisite: PSY-111 OR PSY-121.

PSY-223 Child & Adolescent Psychology, 3 cr.
This course looks at children from a developmental perspective and reflects how children change as a result of age and experience. Developmental processes are presented in three distinct categories or domains – biosocial, cognitive, and psychosocial.

PSY-224 Adolescent Psychology, 3 cr.
Psychology of Adolescence explores the rapid physical, social, emotional, and cognitive changes of adolescents. Students distinguish myths about adolescence from research findings and examine the importance of cultural and historical factors in this crucial transition from childhood to adulthood. Prerequisite: PSY-111 or permission of the instructor.

PSY-225 Adult Developmental Psych., 3 cr.
Focuses on the growth and development of an individual from the middle to later years of the lifespan. The course examines the biological, psychological, and sociological aspects of aging such as the speed of behavior, mental functioning, mental disorders, aging, and death and dying. Student survey myths about the elderly along with current research in the field of geropsychology and gerontology.

PSY-241 Abnormal Psychology, 3 cr.

PSY-251 Social Psychology, 3 cr.
Explores social interaction from both the psychological and sociological perspectives. It is the study of how we think about, relate to, and interact with each other.
PSY-261 Human Sexuality, 3 cr.
Human Sexuality focuses on normal sexual development, human sexual responses, and common sexual problems. It provides factual information on human sexuality and raises practical questions about human sexual behavior. It also helps students examine and evaluate their views and values concerning sexual behavior. Prerequisite: Students must have taken one of the following three courses: PSY-111, SOC-110, SOC-120 or have permission of instructor.

PSY-281 Educational Psychology, 3 cr.
Survey of behavioral theory, classical, operant and vicarious learning. Studies the nature of the learning process, conditions the facilitate learning, problems of learning measurement leading to modern cognativist concepts, and other variables that affect the learning process.

Reading

RDG-030 Intro to College Reading I, 1 cr.
Individualized reading skill development designed to improve comprehension, vocabulary and reading rate. Preliminary course for RDG-031 for some students based on reading level.

RDG-031 Intro to College Reading II, 1 cr.
Individualized reading skill development designed to improve comprehension, vocabulary and reading rate.

RDG-120 College Reading, 1 cr.
An individualized elective course in reading. Prerequisite: RDG-031 or an acceptable assessment score.

Recreation

REC-112 Backpacking, 2 cr.
The course contains basic backpacking skills. Skills covered will include camp craft, equipment and clothing selection, menu planning, and safety in a wilderness setting. Students will attend class to prepare for a two-and-one-half day backpacking trip.

REC-113 Concepts of Wellness, 3 cr.
Organizing and implementing wellness programs for employees in agencies and organizations. Emphasis will be on introduction to and recruitment of employees, fitness testing, prescription of individual and group wellness programs. Lecture and laboratory.

REC-114 Foundations of Recreation, 4 cr.
Designed to help the student better understand the role of recreation and leisure in our society. Provides students with information on agencies providing recreational services.

REC-118 Recreation Leadership, 4 cr.
Students gain an understanding of leadership theories and techniques and also develop an understanding of group dynamics relating to specific populations.

REC-122 Recreation Fieldwork I, 2 cr.
Recreation Fieldwork I is designed to give the student practical on the job experience. It will provide the student with an opportunity to plan, implement and evaluate recreational programs.

REC-132 Orienteering, 2 cr.
Provides students with the opportunity to learn and develop map and compass skills. Specific skills and knowledge include reading and understanding maps, land navigation techniques, and sport orienteering. Emphasis will be placed on integrating this activity into an outdoor recreation program.

REC-133 Outdoor Living Skills, 3 cr.
The course is designed to educate the student on how to travel safely for extended periods in the back-country. The essentials of life and how they can be provided in an outdoor setting will be presented. Related topics such as navigation, back-country medicine and wilderness concepts will also be discussed.

REC-140 Introduction to River Kayaking, 3 cr.
To teach beginner paddlers to safely and enjoyably kayak on gentle rivers.

REC-214 Program Planning and Organization, 4 cr.
Students gain an understanding of many different recreation programs areas and the aspects of developing and conducting programs to meet the needs of various populations.

REC-233 Intro to Outdoor Recreation, 3 cr.
Introduces students to the breadth, depth and scope of outdoor recreation. Topics include the history and philosophy of recreation; the roles that the government and the private sector play in outdoor recreation; the importance of leadership; the basics of program design; and the methods of researching job opportunities in the field. Specific skills include trip planning, menu planning, expedition behavior, outdoor cookery, selection of gear and clothing, campsite management, map and compass.

REC-235 Recreation Practicum, 6 cr.
Advanced practical field experience.

REC-236 Recreation Practicum, 5 cr.
Advanced practical field experience.

Religion

REL-101 Survey of World Religions, 3 cr.
A survey of the major religions of the eastern and western world. Each is placed in its historical context, and its major tenets are explored. Goals include 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-111 Infinity Scholars I-Seminar, 1 cr.
Scholarship expectations, introduction to research projects, service learning and career/educational planning. Prerequisite: recipient of NSF-CSEM scholarship.

SCI-112 Infinity Scholars II Seminar, 1 cr.
A research/capstone project in the area of study for students receiving a NSF-CSEM scholarship. Prerequisite: NSF-CSEM scholarship recipient and sophomore status.
Sign Communication Skills

**SCS-101  Basic Sign Language, 2 cr.**
Presents students with basic skills in the use and understanding of signed English.

Student Development

**SDV-075  Strategies for Academic Success, 1 cr.**
A human development seminar designed to help individual students increase their academic potential. Behavioral modification techniques are used. The effort is to help the student’s behavior become consistent with the student’s stated intentions concerning academic work. Access to this course is by referral.

**SDV-090  College 101, 0 cr.**
An introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/A grading.

**SDV-103  Successful Learning, 1 cr.**
Students master the academic and personal skills needed to succeed in higher education and in life. Content will cover academic, communication and life management skills. Goal setting, time management, note taking, test taking and how to be a lifelong learner will also be covered.

**SDV-106  Library Orientation, 1 cr.**
This course will help you know what kinds of information and services you can find in a library and how to use that information. Knowing how to use library services will save time and money throughout a lifetime.

**SDV-131  Career Exploration, 2 cr.**
Students learn about themselves, theories about career, and resources available to assist in the career exploration and decision-making process.

**SDV-195  Student Government I, 1 cr.**
Encouraging academic excellence within the realm of providing social, recreational, educational and cultural activities.

Sustainable Energy Resources

**SER-101  Intro to Sustainable Energy Resources, 3 cr.**
Introduction to Sustainable Energy Resources is designed to provide a basic understanding of energy, current trends in energy consumption, and the role of sustainable energy resources in today’s society. Topics covered will include matter and energy laws, the history of energy usage by humans, the categories of energy resources, and the environmental problems currently being caused by energy consumption.

**SER-111  Intro to Wind Energy Resources, 3 cr.**
Introduction to Wind Energy Resources is designed to provide a basic understanding of wind as an energy resource. Topics covered will include the history of wind energy usage; the location, magnitude, and availability of wind energy resources; wind energy technologies; and the economic and environmental issues associated with using wind energy resources.

**SER-121  Intro to Biomass Energy Resources, 3 cr.**
Introduction to Biomass Energy Resources is designed to provide a basic understanding of biomass as an energy resource. Topics covered will include the history of biomass energy usage; the location, magnitude, and availability of biomass energy resources; biomass energy technologies; and the economic and environmental issues associated with using biomass energy resources.

**SER-201  Sustainable Energy Resources Mgt., 3 cr.**
Introducing the concepts of natural resources management with an emphasis on sustainable energy resources. Topics covered will include basic natural resources management practices; past, present, and future usage and demand of energy resources; the role of sustainable energy resources in current and future energy policies; and the management of sustainable energy resources.

Sociology

**SOC-110  Intro to Sociology, 3 cr.**
A survey course applying basic sociological concepts, theories, and methods to examine society, culture, cultural institutions, cultural diversity, and cultural stability and change.

**SOC-115  Social Problems, 3 cr.**
Applies basic scientific sociological concepts and principles to the examination of contemporary social issues such as crime, poverty, violence, and inequality.

**SOC-120  Marriage and Family, 3 cr.**
The sociological study of the family and family-related issues in cultural, cross-cultural, historical, and social context.

**SOC-126  Social Science Interim - 1, 1 cr.**
Supplemental enrichment course related to the Social Sciences which includes special projects. P/A grading.

**SOC-160  Introduction to Social Work, 3 cr.**
An introductory course in social welfare systems and social work practice that surveys the historical development of the social work profession in conjunction with the development of the social welfare services in the United States.

**SOC-186  Contemporary Global Issues, 3 cr.**
A survey course to identify and analyze the variety and extent of global economic, political, social and cultural problems and issues.

**SOC-200  Minority Group Relations, 3 cr.**
Survey of the contributions that various minorities have made to the development of the United States.

**SOC-220  Sociology of Aging, 3 cr.**
Discusses the psychological and societal changes and needs of the elderly. Emphasis is on the effect of, and adaptation to, role changes such as retirement and institutionalization. It also deals with perspectives on adult development in the areas of emotional, cognitive and personality development. Grief, dying, and death, the final stages of the life process are examined from varying points of view.
SOC-270 Social & Behavior Research Methods, 3 cr.
An introduction and survey of the major concepts and strategies involved in the undertaking of empirical research. Students learn the meaning of such terms as reliability, validity, variance, and hypothesis. The major research methods: include the true experiment, field research, secondary analysis, and surveys. Students assess sampling techniques and table construction.

SOC-890 Service Learning, 1 cr.
The Service Learning field experience offers students a hands-on opportunity to explore professional and technical aspects within an organization. Through this Service Learning project the student must be involved with a meaningful project, have an academic connection, and have an opportunity to reflect on the experience upon its completion.

Speech

Development of the basic skills involved in a variety of speaking situations, including oral presentations and interpersonal speaking. Emphasis is placed on organization, voice, articulation, listening, non-verbal communication, critical thinking, and methods of dealing with speech comprehension.

SPC-112 Public Speaking, 3 cr.
This course helps students develop confidence in both professional and personal presentation skills. Topics include critical thinking, organization, and audience analysis in both professional and personal presentation skills. Topics include critical thinking, organization, audience evaluation, effective listening, audience message retention, and the use of visual help. Course requirements include that the student be actively engaged in researching appropriate related material from newspapers, periodicals, or the web. This research will enhance the students learning and develop deeper insights into the course topics. The instructor will define specific course related assignments that require active research efforts as a requirement for successful course completion.

SPC-121 Interpersonal Communication, 2 cr.
Designed to improve ability in speaking to others in interpersonal situations such as conversation, relationships, business, and group discussions.

SPC-122 Interpersonal Communications, 3 cr.
Examines how humans communicate in one-on-one situations through personal and professional relationships.

Surgical Technology

SUR-121 Surgical Techniques I, 6 cr.
Study of professional responsibilities and conduct; operating room environment; fire and electrical safety; universal precautions; and operating room safety. Basic microbiology and its relationship to healing and the many types of pharmacological agents used in surgery will be included.

SUR-122 Intro to Surgical Technology, 4 cr.
The principles of aseptic techniques including methods of sterilization and disinfection; procedures for scrubbing, gowning and gloving; and the means for sanitizing the operating room. Includes preoperative routine.

SUR-123 Patient Care Concepts, 2 cr.
This course introduces the student to the ancillary areas of the surgical environment, to assess patient needs, and to learn pre and post-operative routines. The students will learn appropriate responses to legal, ethical, and moral issues.

SUR-222 Surgical Techniques II, 2 cr., 4 cr.
This course completes the study of surgical techniques, specifically supplies and equipment. Operating furniture and equipment; sutures and sponges; drainage systems; counts; and a final encompassing unit on establishing a sterile field are covered. This course is taught in conjunction with SUR-223.

SUR-223 Surgical Procedures, 6 cr.
This course addresses diagnostic, general and specialized surgery. General surgery covers procedures on hernias, thyroid and breast. Other units deal with common procedures and special instruments needed for specialized surgery in the following areas: Gastrointestinal; obstetrics and gynecology; genitourinary; ear, nose and throat; ophthalmic; plastic; orthopedic; neurosurgery; thoracic; and cardiovascular/vascular surgery.

SUR-227 Surgical Procedures Lab, 2 cr.
This course will allow students to apply principles learned during Surgical Procedures lecture in a hands-on lab setting. Students will further redefine skills related to the three phases of case management as they apply to each surgical specialty.

SUR-420 Pharmacology for Surgical Tech, 2 cr.
This course emphasizes the classifications of medications used in surgery. The student will become familiar with the general terminology used with medication application.

SUR-430 Microbiology - Surgical Tech, 2 cr.
This course includes the correlation of the relationship to the practice of sterile technique and infection control in the operative setting. The student will use the microscope to contrast and compare the structure and characteristics of microorganisms.

SUR-440 Biomedical Science for Surgical Tech, 2 cr.
This course provides a broad base of knowledge for the entry-level surgical technologist in the area of computers, electricity, physics, and robotics. The understanding of the fundamental principles of these technologies is essential.

SUR-519 Surgical Technology Practicum, 4 cr.
This course provides clinical experience with a variety of preoperative assignments to build skills required for complex preoperative patient care. Emphasis is placed on greater technical skills, critical thinking, speed, efficiency, and autonomy.

SUR-520 Surgical Technology Practicum I, 2 cr.
This clinical course provides the students an orientation to the Hospital Operating Room. This allows the students opportunity to apply skills learned in the Patient Care Concepts and Surgical Techniques I courses.

Welding

WEL-111 Welding Blueprint Reading, 3 cr.
Blueprint reading and layout to develop essential skills to permit use of blueprints in job-like situations.

WEL-121 Oxy Fuel Welding & Cutting, 4 cr.
Oxy-acetylene welding in correlation with identification of metals; care and use of welding equipment; selection of rods and fluxes; and safety. Lecture and laboratory.
Prerequisites:

- WEL-121 and WEL-160

WEL-128  Brazing / Soldering, 2 cr.
Identification of metal and what filler is needed to join these materials. Prerequisites: WEL-121 and WEL-160

WEL-158  Structural Weld, 4 cr.
Designed to develop techniques required to properly weld structural steel and pass the AWA certification examination. Lecture and laboratory. Prerequisites: WEL-121 and WEL-160.

WEL-160  Arc Welding I (SMAW), 5 cr.
Safety factors and practices relating to welding machines, electrodes and positions used in arc welding. Lecture and laboratory. Prerequisites: WEL-121 and WEL-160.

WEL-179  Special Processes/Procedures, 3 cr.
Ferrous to ferrous, nonferrous to nonferrous hard surfacing used in the welding field today. Lecture and laboratory. Prerequisites: WEL-121 and WEL-160.

WEL-180  GMAW/GTAW, 2 cr.
Studies the necessary fundamentals of the metallic inert gas and tungsten gas processes. Prerequisite: WEL-180.

WEL-183  GMAW/GTAW, 3 cr.
Studies MIG and TIG welding in correlation with the use of equipment, variables, safety and data for welding metals. Prerequisite: WEL-180.

WEL-210  Production Welding, 3 cr.
Work is done quickly, uniformly and close to tolerances. Design layout and building jigs from prints are required. Prerequisites: WEL-180 and WEL-183.

WEL-303  Pipe Welding/SMAW, 3 cr.
Application of safe procedures, theory and practice in the repair of metals using oxy-acetylene, arc and gas metal arc welding processes. Students are taught in a hands-on setting the basic procedures for repairing fractured metal. Prerequisites: WEL-160, WEL-180, WEL-183.

WEL-310  Pipe Welding, 5 cr.
Develops the exacting techniques required to properly weld pipe installations. Lecture and Laboratory. Prerequisites: WEL-160, WEL-180, WEL-183.

WEL-334  Trade & Industry Welding, 2 cr.
Principles and applications of gas and MIG welding theory, safety and shop practices are covered. Lecture and laboratory.

WEL-337  Industrial Technical Welding, 2 cr.
Introduction to electric, gas, wire and oxy-acetylene welding.

WTT-103  Introduction to Wind Energy, 3 cr.
Introduction to Wind Energy students will be exposed to the many facets of the wind industry. This course will cover the history and development of the wind industry, terminology used in the industry, types and applications of various wind turbines, environmental and economic issues of the wind industry, other topics that are appropriate.

WTT-106  Wind Turbine Field Training, 3 cr.
Wind Turbine Field Training students will be introduced to the aspects of the industry standards, requirements, and issues that are a part of working in the field. Information to be covered will include but not be limited to safety training, working around cranes and riggings, tower climbing, fasteners and lubricants used in the industry, other subject matter that may be appropriate.

WTT-114  Field Training & Project Operation, 5 cr.
Field Training & Project Operations will introduce the students to industry standards of safety, operation and maintenance of wind turbines and project operations. Students will also benefit from field trips to operational projects to gain perspective of day to day operations of a wind turbine generation facility.

WTT-116  Intro/Wind Turbine Operations, 3 cr.
Introduction to Wind Turbine Operations will introduce the students to the daily operation of a wind turbine facility. Course content will include reporting requirements, documentation, use of technical manuals, controllers and monitoring systems, other pertinent content.

WTT-118  Direct Current Elect Theory, 4 cr.
Direct Current Electrical Theory is an introduction to basic electrical theory and the components that make up electrical circuits. D/C Theory will be presented in a lecture and laboratory format. Course content will include, but not be limited to basic circuits, electrical components and their applications, hands-on reinforcement of theory covered during lecture.

WTT-123  Alt Current Elect Theory I, 4 cr.
Students will be exposed to the principles and applications of alternating current (AC). Prerequisite of AC1 is DC.

WTT-126  Basic Hydraulics, 3 cr.
This course will introduce students to the basic structure and application of hydraulics. Students will also learn how to read hydraulic schematics and troubleshoot basic hydraulic components.

WTT-132  Electric Motors and Generators, 2 cr.
Introduction to the terminology and basic principals of Direct Current and Alternating Current motors and generators. Students will be exposed to not only single phase but three phase motors and generators as well as the controls that allow operation.

WTT-133  Wind Turbine Mechanical System, 3 cr.
Wind Turbine Mechanical Systems will introduce the students to gearboxes and other mechanical systems that make up subsystems of today’s wind turbine.

WTT-134  Electric Motors & Generators, 4 cr.
Electric motors and generators is an introduction to types of motors and generators that are used today. The characteristics of Direct Current and Alternating Current motors and generators will be discussed and demonstrated through lecture and hands on laboratory sessions.

WTT-143  Alternating Current Elect Theory I, 3 cr.
Students will be exposed to alternating voltage and current and the many properties that will assist them in troubleshooting AC circuits. Instruction will include capacitive and inductive circuits. Lab includes hands-on training to enhance lecture information.
WTT-201 Wind Turbine Site Construction/Locate, 1 cr.
Students attending “Wind Turbine Site Construction and
Locations” will be exposed to the various aspects of construction
as it applies to the Wind Industry. Students will be engaged in
discussions on the use of cranes, rigging, tower assembly,
commissioning as well as other events that encompass Wind
Turbine Power Production facilities.

WTT-204 Wind Turbine Siting, 4 cr.
This course will allow students the opportunity to learn the
techniques, methodology, and concepts used to develop projects
around the world.

WTT-214 Basic Networking/Comp Tech, 3 cr.
Foundational training in local area networking technology,
protocols, and installation procedures. Troubleshooting minor
hardware problems, installing hardware, system configuration,
and running diagnostics.

WTT-216 Power Generation & Transmission 3 cr.
Power Generation and Transmission will serve as an introduction
to the generation of electrical power with a wind turbine
generator, moving that power through a local transmission
system to a substation where a customer will purchase the
generated power. This course will cover all aspects of working
with components of a high voltage transmission system.

WTT-223 Airfoils and Composite Repair, 3 cr.
Airfoils and Composite Repair will prepare the student for
working with wind turbine blades to include terms, manufacture
and repair of wind turbine blades.

WTT-225 Data Acquisition & Assessment, 4 cr.
This course will give students information on how wind resource
data is collected and analyzed for the use in the development of
wind powered generation of electricity. Students will also learn
how to assess power production of individual wind turbines.

WTT-235 Programmable Logic Control Systems, 4 cr.
This course will introduce students to Programmable Logic
Controllers (PLC's), primarily the Allen Bradley SLC 500 line of
processors.

WTT-244 Alt Current Elect Theory II, 4 cr.
Alternating Current Electrical Theory II will consist of instruction
that will build upon experience gained in Direct Current Theory
and Alternating Current Theory I. Students will be introduced to
advanced concepts of electrical theory.

WTT-245 Electrical Practical Application, 4 cr.
Electrical Practical Applications will provide students with
practical wiring exercises involving installation, wiring, and
troubleshooting of electrical devices and equipment used in, but
not specific to, wind turbine control systems. Students will study
electrical diagrams, design of electrical systems, and electrical
safety.

WTT-932 Internship, 5 cr.
The wind turbine internship will give students the opportunity to
apply skills developed during the first two semesters of the Wind
Energy and Turbine Technology program.
Faculty & Staff

BOARD OF TRUSTEES

Jack Tatman, President, District 3, Spirit Lake
Jan Lund, Vice President, District 2, Estherville
Susan Zulk, District 4, Spencer
Lynn Kueck, District 7, Algona
Bud Kyle, District 5, Milford
Patrick Kibbie, District 6, Emmetsburg
Jim Miller, District 1, Ringsted

PRESIDENT’S CABINET

Harold Prior (2006)
President
B.A., Peru State College; M.S., Northwest Missouri State University; Ph.D., Iowa State University

Thomas Brotherton (2003)
Executive Dean, Emmetsburg Campus
B.A., University of Iowa; M.A., University of Nebraska-Omaha

Jane Sewell Campbell (1994)
Executive Director of Marketing
B.A., University of Northern Iowa

Julie Carlson (1985)
Dean of Enrollment Management
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Dean, Spencer Campus
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Judy Cook (1984)
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Executive Director of Facilities Management
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Executive Dean, Estherville Campus
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Chief Financial Officer
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Clark Marshall (1986)
Executive Director of Economic Development/Continuing Education
Business management experience, 24 years

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Valerie Newhouse (1998)
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Jolene Rogers (2000)
Executive Director of Institutional Advancement
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ADDITIONAL MEMBERS COMPRISING ADMINISTRATIVE STAFF

Randy Beernink (1983)
Computer Center Director
B.A., Northwestern College; B.A., University of Iowa

John Beneke (1991)
Financial Aid Director (1991)
B.A., Buena Vista University; M.A., Iowa State University

Brenda Colegrove (1997)
Director of Libraries
B.S., M.A., Mankato State University

Mary Faber (1995)
Student Support Services/Upward Bound/Talent Search Project Director
B.A., University of Northern Iowa; M.A., University of Iowa

Rod Ferguson (1987)
Building and Grounds Manager

Kari Hampe (1994)
Secondary Programs Director
B.S., Northwest Missouri State University; M.S., Southwest State University

Bill Lapczenski (1983)
Director of Auxiliary Services
A.A.S., Iowa Lakes Community College

Troy Larson (2007)
Athletics Director/Men’s Head Basketball Coach/ Housing Director
A.A., Iowa Lakes Community College; B.S., Morningside College; M.B.A., University of South Dakota

Kelly McCarty (1999)
Small Business Development Center
B.A., University of Northern Iowa
### FACULTY AND PROFESSIONAL STAFF

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
<th>Education/Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stephen Pelzer (1998)</td>
<td>Business Manager</td>
<td>B.A., University of Northern Iowa; M.B.A, Southwest Minnesota</td>
</tr>
<tr>
<td>Ann Petersen (1980)</td>
<td>Director, Special Needs</td>
<td>B.S., University of South Dakota; M.A., University of Iowa</td>
</tr>
<tr>
<td>Scott Stokes (2003)</td>
<td>Registrar</td>
<td>B.A., University of Northern Iowa; M.S., Southwest Minnesota</td>
</tr>
<tr>
<td>Bernadette Wise, R.N. (1996)</td>
<td>Pre Nursing Coordinator, Nursing Instructor</td>
<td>B.S.N., College of St Teresa; M.A., Univ. of Texas at El Paso</td>
</tr>
<tr>
<td>Theresa Zeigler (1993)</td>
<td>Director of Distance and Global Education</td>
<td>B.A., University of Northern Iowa</td>
</tr>
<tr>
<td>Daniel Acosta (2006)</td>
<td>Admissions Counselor/Assistant Baseball Coach</td>
<td>B.S., United States Sports Academy</td>
</tr>
<tr>
<td>Trudy Strain-Ahrens (1997)</td>
<td>ASPIRES Specialist</td>
<td>B.S., Iowa State University; M.S., Southwest State University</td>
</tr>
<tr>
<td>Tammy Anderson (2007)</td>
<td>Account Receivable Processor</td>
<td>Spencer School of Business</td>
</tr>
<tr>
<td>Dave Appelhons (1986)</td>
<td>Print Shop Specialist</td>
<td>Diploma, Iowa Lakes Community College</td>
</tr>
<tr>
<td>Carol Ayres (1988)</td>
<td>Instrumental Music Professor/ Jazz Band Director</td>
<td>B.A., Buena Vista University; M.Mus.Ed., University of South Dakota</td>
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<tr>
<td>Bridget Bailey (2004)</td>
<td>Nursing Assistant Professor</td>
<td>Diploma, St. Joseph School of Nursing, Sioux City; B.S.N., University of Iowa; M.S.N., University of Phoenix</td>
</tr>
<tr>
<td>DeeAnn Bates (1998)</td>
<td>Continuing Education Programmer</td>
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<tr>
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<tr>
<td>Marvin Carlson (1989)</td>
<td>Agriculture Production Associate Professor</td>
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<tr>
<td>Calvin E. Christensen (1985)</td>
<td>Agribusiness Technology Professor/Coordinator</td>
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<tr>
<td>Jamie Christensen (1992)</td>
<td>Early Childhood Education/Child Care Program Professor</td>
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<tr>
<td>Julie Clark (2002)</td>
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<tr>
<td>Shane Conley (2007)</td>
<td>Motorcycle Mechanic Instructor</td>
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<tr>
<td>Larry Danielson (1986)</td>
<td>Automotive Technician Associate Professor/Coordinator</td>
<td>Diploma, Lincoln Tech; B.A., Buena Vista University</td>
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<tr>
<td>Jerimiah DePyper (2005)</td>
<td>Computer Support Specialist</td>
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<tr>
<td>David DeVary (2007)</td>
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<tr>
<td>Lora Devereaux (2006)</td>
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<td>Douglas Dingel (1990)</td>
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<td>Steven Dobbins (2001)</td>
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<td>Lynn Dodge (1996)</td>
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<td>Kelli Egland (2005)</td>
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<tr>
<td>Katie Elbert (2003)</td>
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<td>Kerry Erickson (1999)</td>
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<td>Michelle Erickson (1998)</td>
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<td>Bonnie Ewaldt (1997)</td>
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<td>Kevin Farley (2008)</td>
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<td>Marilyn Fleming (1996)</td>
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<td>Brett Fuelberth (1997)</td>
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<tr>
<td>Janet Gentle</td>
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<td>Seana Godbold</td>
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<td>Dana Grafft</td>
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<tr>
<td>Carol Hartig</td>
<td>Medical Assistant Professor</td>
<td>A.A.S., Iowa Lakes Community College; B.S.N. University of Iowa</td>
</tr>
<tr>
<td>Ahmad Hemami</td>
<td>Wind Energy Technology Instructor</td>
<td>B.S., University of Teheran; M.A. and Ph.D., University of Salford in England</td>
</tr>
<tr>
<td>Janice Hoover</td>
<td>Emmetsburg Food Service Assistant Coordinator</td>
<td>B.A., Iowa Lakes Community College; B.A., University of Sioux Falls</td>
</tr>
<tr>
<td>Karen Howard</td>
<td>Administrative Assistant to the Dean</td>
<td></td>
</tr>
<tr>
<td>Kevin Howard</td>
<td>Aspires Specialist</td>
<td>A.A., Iowa Lakes Community College; B.A., University of Sioux Falls</td>
</tr>
<tr>
<td>Johnny Hurley</td>
<td>Business Assistant Professor</td>
<td>A.A., Iowa Lakes Community College; B.A., Buena Vista University; M.S. Emporia State University</td>
</tr>
<tr>
<td>Jason Jacobson</td>
<td>Auto Technician Program Instructor/Coordinator</td>
<td>A.A.S., Iowa Lakes Community College</td>
</tr>
<tr>
<td>Renee Jedlicka</td>
<td>Speech Professor</td>
<td>B.A., Loras College; M.A., Mankato State University</td>
</tr>
<tr>
<td>Anne Johnson</td>
<td>Assistant Admissions Director</td>
<td>B.A., Wichita State University, M.P.A., Mankato State University</td>
</tr>
<tr>
<td>Debra Jones</td>
<td>Office Specialist Professor/Coordinator</td>
<td>B.S., M.S., Mankato State University</td>
</tr>
<tr>
<td>Eileen Kadow</td>
<td>Mathematics Associate Professor</td>
<td>B.S., Briar Cliff; M.S.M., Iowa State University</td>
</tr>
<tr>
<td>Jan Kamies</td>
<td>Learning Center Associate Professor</td>
<td>B.A., Northwestern University; M.A., Morningside College</td>
</tr>
<tr>
<td>Linda Kautz</td>
<td>Enrollment Management Assistant</td>
<td></td>
</tr>
<tr>
<td>Shawn Klemm</td>
<td>Secondary Auto Mechanics Instructor</td>
<td>A.A.S., Iowa Lakes Community College</td>
</tr>
<tr>
<td>Bob Klepper</td>
<td>Science Professor</td>
<td>B.S., Buena Vista University; M.S., Iowa State University; Ph.D., Columbia Pacific University</td>
</tr>
<tr>
<td>Troy Kleve</td>
<td>Farm Equipment and Diesel Technology Program Instructor/Coordinator</td>
<td>A.A.S., Iowa Lakes Community College</td>
</tr>
<tr>
<td>Deb Knight</td>
<td>Assistant to the Wellness Center Director</td>
<td></td>
</tr>
</tbody>
</table>
Planning and Development Grantwriter
B.S., Northwest Missouri State University

Amy Koenke (2008)
Educational Talent Search Coordinator
A.A., Iowa Lakes Community College; B.S., Drake University

Michelle Kogel (2005)
Save Program Assistant Professor/Coordinator
B.S., Iowa State University; M.S., University of Nebraska at Kearney

Leslie Lausen (2006)
Talent Search Advisor
B.A., Buena Vista University

Julia Leupold (2006)
Alternative High School Instructor
B.S., Iowa State University

Alternative High School Lead Instructor
B.S., Iowa State University

Byron Lindell (1997)
Art Professor
A.A., Iowa Lakes Community College; B.F.A., M.A., Mankato State University

Cindy Magee (1995)
Alternative High School Lead Instructor
B.A., Texas Tech University

Lisa Mart (2001)
Project Learning Instructor
A.S., Iowa Lakes Community College

Jason McCloud (2007)
Housing Manager/Head Wrestling Coach/Intramural Coordinator
B.A., Arizona State

Patrick McCoy (1997)
Wind Energy Turbine Technology Associate Professor
B.S., Northwest Missouri State University

Dennis McDonald (1989)
Communications Professor
B.S., Iowa State University; M.S., Mankato State University

Alexis McQuown (2007)
Distance Education Specialist
A.A., Iowa Lakes Community College; B.A. Buena Vista University

Karen Meade (2007)
Science Instructor
A.A., Iowa Central Community College; B.S., M.A., M.S., and Ph.D., University of Iowa

Corey Menning (2003)
Construction Technology Instructor/Coordinator
A.A.S., Iowa Lakes Community College

Lana Miller (1996)
Technology Specialist
A.A., Orange County Community College

Tricia Morfitt (2008)
Institutional Advancement Events Coordinator
B.A., Southwest Minnesota State University

Kathy Muller (1979)
Human Resources Coordinator
A.A.S., Iowa Lakes Community College

Judy Naber (2002)
Communications Associate Professor
B.A., Augustana; M.A., University of South Dakota

Sandra Naig (1987)
Bookstore Coordinator

Sandy Naig (1992)
Food Service Coordinator
A.A., Iowa Lakes Community College

Jason Nell (2001)
Success Center Instructor/Head Baseball Coach
B.A., University of Wisconsin-River Falls; M.A., Loras

Bryan Nelson (1998)
Secondary Broadcast Media Associate Professor/Coordinator
B.A., University of Kansas

Michael Nichols (1993)
Spanish/English Professor
B.A., M.A., University of Northern Iowa

Lori Nielsen (1999)
Special Needs Facilitator
B.S., Mankato State University; M.S.E., Southwest State University

Kyle Norris (2005)
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B.S., South Dakota State University; M.S., Indiana University

Molly O’Hara (2006)
Business Education Programmer
B.A., Lora College; M.S., Emporia State University

Steve Olerich (2001)
Food Service Coordinator
A.A., Iowa Lakes Community College

Martha Olson (1999)
Nursing Assistant Professor
B.S.N., University of Iowa; M.S., Southwest State Univ.

Laure Oppenheimer (2006)
Nursing Instructor
B.S.N., University of Iowa; M.S.N., Waldon University

Cindy Oviatt (2001)
Administrative Assistant to the President
A.S., Iowa Lakes Community College
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Years</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jane Palmer (2005)</td>
<td>Practical Nursing Supervisor</td>
<td></td>
<td>B.S.N., University of Iowa</td>
</tr>
<tr>
<td>Carol Peaslee (1992)</td>
<td>Web Specialist/Marketing Writer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colleen Peltz (1986)</td>
<td>Developmental Studies Professor</td>
<td></td>
<td>B.S., University of Iowa; M.A.E., University of Northern Iowa</td>
</tr>
<tr>
<td>Anne M. Peterson (1988)</td>
<td>Mathematics Professor</td>
<td></td>
<td>B.S., Iowa State University; M.S., Mankato State University</td>
</tr>
<tr>
<td>David Peterson (2005)</td>
<td>Biomass Technology Assistant Professor/Coordinator</td>
<td></td>
<td>A.A.S., Bismarck State College; B.S., North Dakota State University</td>
</tr>
<tr>
<td>Gary S. Phillips (1982)</td>
<td>Environmental Studies Professor/Coordinator</td>
<td></td>
<td>B.S., Iowa State University; M.A., Specialist, University of Northern Iowa</td>
</tr>
<tr>
<td>Greg Poe (1989)</td>
<td>Farm Supervisor</td>
<td></td>
<td>A.A.S., Indian Hills Community College</td>
</tr>
<tr>
<td>Rachel Poncelet (2007)</td>
<td>Counselor/Instructor</td>
<td></td>
<td>A.A. Iowa Lakes Community College; B.B.A., Dakota State University</td>
</tr>
<tr>
<td>Robert Pritchard (2005)</td>
<td>Broadcast Media Assistant Professor/Coordinator</td>
<td></td>
<td>B.S., University of South Dakota; M.S., University of Sioux Falls</td>
</tr>
<tr>
<td>Brian Radtke (1999)</td>
<td>Student Life Facilitator/Head Women's Basketball Coach</td>
<td></td>
<td>A.A., Iowa Lakes Community College; B.A., University of Iowa</td>
</tr>
<tr>
<td>Diana Refsell (1999)</td>
<td>Counselor/ Accommodations Associate Professor</td>
<td></td>
<td>B.A., Upper Iowa University; M.S., Southwest State University</td>
</tr>
<tr>
<td>Denise Reimer (1987)</td>
<td>Sales and Marketing Management Professor/Coordinator</td>
<td></td>
<td>A.A.S., Iowa Central Community College; B.A., University of Northern Iowa; M.S., Drake University</td>
</tr>
<tr>
<td>Greg Reimer (1986)</td>
<td>Information Technology Associate Professor/Coordinator</td>
<td></td>
<td>B.A., University of Minnesota</td>
</tr>
<tr>
<td>Jeannie Reinders (1985)</td>
<td>Financial Aid Specialist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tara Rochleau (2005)</td>
<td>Nursing Assistant Professor</td>
<td></td>
<td>A.D.N., North Iowa Area Community College; B.S.N., University of Iowa</td>
</tr>
<tr>
<td>Angie Rose (1992)</td>
<td>Graphic Design Artist/Marketing Assistant</td>
<td></td>
<td>A.S., Iowa Central Community College</td>
</tr>
<tr>
<td>Tammy Rozeboom (1985)</td>
<td>Assistant to the Campus Dean</td>
<td></td>
<td>Diploma, Spencer School of Business</td>
</tr>
<tr>
<td>Gary Schmidt (2000)</td>
<td>Construction Technology Associate Professor/Coordinator</td>
<td></td>
<td>B.A., University of Northern Iowa</td>
</tr>
<tr>
<td>Nancy Schoenewe (1987)</td>
<td>Communications Professor</td>
<td></td>
<td>B.A., M.A., University of South Dakota</td>
</tr>
<tr>
<td>Rob Schultz (2004)</td>
<td>Auto Collision Technology Instructor/Coordinator</td>
<td></td>
<td>Diploma, Iowa Lakes Community College</td>
</tr>
<tr>
<td>Rebecca Simons (1994)</td>
<td>Business Professor/Medical Secretary Coordinator</td>
<td></td>
<td>A.A.S, A.A., Iowa Lakes Community College; B.A., Mankato State University; M.A., Buena Vista University</td>
</tr>
<tr>
<td>Kathy Skelly (1998)</td>
<td>Social Science Associate Professor</td>
<td></td>
<td>B.S., M.A., Mankato State University</td>
</tr>
<tr>
<td>Gina Splitt (2005)</td>
<td>Nursing Assistant Professor</td>
<td></td>
<td>B.S.N., Creighton University; M.S.N., Univeristy of Phoenix</td>
</tr>
<tr>
<td>Joseph Steele (2007)</td>
<td>Science Instructor</td>
<td></td>
<td>B.S., University of South Dakota; M.A., Iowa State University</td>
</tr>
<tr>
<td>Mary Steele (1988)</td>
<td>RSVP Director</td>
<td></td>
<td>Community service and journalism experience</td>
</tr>
<tr>
<td>Sarah Stokes (2007)</td>
<td>Assistant to the Athletic Director</td>
<td></td>
<td>A.A., Iowa Lakes Community College, B.A., University of Northern Iowa</td>
</tr>
<tr>
<td>Miranda Stover (2005)</td>
<td>Nursing Assistant Professor</td>
<td></td>
<td>A.D.N., Western Iowa Tech Community College; B.S., Iowa State University</td>
</tr>
</tbody>
</table>
Kyle Struve (2007)
Graphic Design Artist/Marketing Assistant
B.A., University of Iowa

Molly Struve (2007)
Admissions Counselor
A.A., Iowa Lakes Community College; B.A., University of Northern Iowa

Anthony Stubbs (1989)
Communications Professor
B.A., Loras College; M.A., Mankato State University

Wayne Sunde (1989)
Parts Department Coordinator
B.S., Mankato State University

Marsha Swanson (1989)
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B.S., Iowa State University; M.A. University of Northern Iowa

Richard Swanson (1989)
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B.S., M.A., Iowa State University

Patricia Tedesco (1999)
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B.A., Wayne State College; M.A., Morningside College

Tomas Thayer
Upward Bound Coordinator
A.A., Iowa Lakes Community College; B.A., Buena Vista University

Steve Timmons (1998)
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A.A., Iowa Lakes Community College

Darrell Todd (2005)
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Scott Tschetter (1997)
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B.A., Wartburg College

Steve Turner (2005)
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A.S., Iowa Lakes Community College

Anne Van De Walle (2001)
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Jack Vedder (1998)
Building and Grounds Supervisor

Amy Ver Mulm (1997)
Human Services/Disability Studies Assistant Professor/Coordinator
M.S., Southwest State University

Theresa Waechter (1994)
Administrative Assistant
B.A., Briar Cliff College

Lois Warner (1996)
Library Media Specialist
B.S., University of North Dakota; M.L.S., Western Michigan University

Secondary Programs Assistant
A.A., Iowa Lakes Community College

Secondary Construction Technology Assistant Professor/Coordinator
B.A., Briar Cliff University

Jim Weipert (1998)
Social Science Associate Professor
B.S., University of Northern Iowa; M.S.W., Washington University

Linda Wiegman (1989)
Career Resource Center Coordinator
B.S., University of Nebraska; M.A., University of Iowa

Neal Williamsen (1995)
Ag Production Beef/Ag Transfer Professor
B.S., University of Nebraska, Lincoln; M.S., Iowa State University

Debbie Wilson (1999)
Graphic Design and Technology Associate Professor/Coordinator
A.A., A.S., Iowa Lakes Community College; B.A., University of Northern Iowa

Peggy Wilson (1978)
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Annette Wimmer (1985)
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B.A., M.S., University of Wisconsin-Stout

Steven Wise (2008)
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Al Wudel (1983)
Television Center Station Engineer
A.S., B.S., University of South Dakota at Springfield

Jeannie Wunder (1986)
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Doug Zemler (2008)
Wind Turbine Energy Instructor
A.A.S Southwest Community Technical College

Wind Turbine Instructor/Coordinator
A.A.S., Southwestern Technical College
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**Work Study Program** .......................................... 7
2008-2009 Calendar

FALL SEMESTER 2008
August 14, 18, 19, 20 - Official Registration Days (for those not previously registered)
August 20 - Faculty Return
August 21 - Offices closed until 1:00 p.m. for fall staff inservice
August 25 - Orientation for Freshmen-Evening Classes Begin-4:30
August 26 - Day Classes Begin
September 1 - Holiday, No Classes, Offices Closed
October 17 - No Classes, Offices Open
November 26 - No Classes, Offices Open
November 27, 28 - Holiday, No Classes, Offices Closed
December 11 – 17 (weather make-up on 18th) - Final Exams (Begin 4:30 p.m. on December 12)
December 19 - Last Day of Semester
December 24 – January 4 - All College Offices Closed

SPRING SEMESTER 2009
January 5 – 9 - No Classes, Offices Open
January 7, 8, 9, 12 - Official Registration Days (for those not previously registered)
January 12 - Faculty Return
January 13 - First Day of Classes
January 19 - Holiday, No Classes, Offices Closed
February 13 - No Classes, Employee Inservice
March 16 – 20 - Spring Break, Offices Open
April 10 - Holiday, No Classes, Offices Closed
April 13 - No Classes, Offices Open
May 11 – 14 - Final Exams
May 15 - Last Day of Semester/Commencement

SUMMER TERM 2009
Vocational/Technical/Career Option
Schedule will vary by program and will be published by the Deans’ Offices
May 25 - Holiday, No Classes, Offices Closed
July 3 - Holiday, No Classes, Offices Closed

First Arts & Sciences Summer Session
May 21, 22 - Official Registration Day (for those not previously registered)
May 25 - Holiday, No Classes, Offices Closed
May 26 - First Day of Classes
June 25 - Last Day of First Session

Second Arts & Sciences Summer Session
June 26, 29 - Official Registration Days (for those not previously registered)
June 30 - First Day of Classes
July 3 - Holiday, No Classes, Offices Closed
July 31 - Last Day of Second Session
July 31 - Summer Commencement

FALL 2009
August 20, 24, 25, 26 - Registration Days (for those not previously registered)
August 31 - First Day of Classes

This calendar is subject to change.