2001-2003

IOWA LAKES
COMMUNITY COLLEGE

Catalog

Chart Your Own Course
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 73,000 people reside in this predominantly rural five-county district encompassing approximately 2,900 square miles. Through its two campuses, three centers and an interactive distance learning system, Iowa Lakes currently enrolls about 2,800 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 connection with the Iowa Communications Network (ICN), a fiberoptic 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 and 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.

Some selected goals are:

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 and to help employers maintain a competitive work force.
• Promote 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 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 major campuses are located at Emmetsburg and Estherville. Centers are located in Algona, Spencer and Spirit Lake.

The Estherville Campus is located in the eastern part of Estherville at 300 South 18th Street. Facilities constructed since 1972 serve liberal arts, career option, vocational-technical programs and an alternative high school.

Vocational-technical 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 center with facilities for liberal arts courses, community services, education services, a success center, library and an alternative high school. The Algona Center is located just north of the city at 2111 U.S. Highway 169.

The Spencer Center, located at the Gateway North Center at 1900 Grand Avenue, includes facilities for evening and weekend college liberal arts courses, a computer lab, community services, education services, alternative high school, a success center, library, and the area small business development center. An alternative high school is located nearby.

The Spirit Lake Center opened in 1984. In late 1995 the center moved into new facilities located at 2008 Hill Avenue. The new building houses evening and weekend college, liberal arts courses, a computer lab, community services, education services, a success center 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 has four channels and transmits 35 to 40 live college courses per semester to a potential 12 receiver sites. All courses necessary for a two-year Associate in Arts degree are offered on the system as well as numerous “one shot” programs and live teleconferences. This brings programming within a short drive of any potential student in the counties served by Iowa Lakes.

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 or center is equipped for two-way television and audio.

The continuing education department, with headquarters at 620 First Avenue South in Estherville, uses classroom facilities at college owned sites and in Area III school districts to deliver instruction and services to local residents. The department has an Education and Training Center at 16 South Sixth Street in Estherville.

Governance and Administration

The college is governed by a seven-member board of directors 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 Council, central administrative staff and the college administrative computer center.

In addition to the college president, the President’s Council consists of a vice president of administration, executive dean of the Emmetsburg campus, executive dean of the Estherville campus, executive director of continuing education/economic development, executive director of planning and development, executive director of finance, executive director of institutional advancement, executive director of plant services and the executive director of marketing.

The President’s Council, 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 Institutions of Higher Education 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 profit from the educational programs offered at the college. Application forms may be obtained from high school counselors or from the admission offices of Iowa Lakes Community College at 3200 College Drive, Emmetsburg, IA 50536 or 300 South 18th Street, Estherville, IA 51334. Telephone requests may be directed to the Emmetsburg campus, 712/852-5212, toll free 800/346-6018, or 800/242-5108, or to the Estherville campus, 712/362-7945, toll free 800/521-5054 or 800/242-5106.

ADMISSION POLICIES—CREDIT PROGRAMS

Iowa Lakes admits students to the arts and science, career option or 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. Participation in the American College Test (ACT) program and submission of scores is recommended. Nursing applicants must submit ACT program scores, three references and meet with nursing faculty for an interview. Some programs require medical examinations, assessment before admission and/or advance fee deposits.

Applicants will be notified of their admission to the college by the director of admissions.

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 admissions 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.

Students who have been classified as non-residents for this purpose and who believe they should be eligible for resident tuition may apply for reconsideration of their cases. The director of records and registration may require written documents, affidavits and other evidence considered necessary to establish the residency of the student. This may include rent receipts, voter registration information, driver’s license, motor vehicle registration, or other materials. 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.

A decision by the director of records and registration which the student feels is incorrect may be appealed to the Academic Review Committee, which acts as the appeals body for residency questions.
Refugees are accepted into this country by the U. S. government and into the state with the recommendation of the governor. They are placed into a community with the full intention of establishing residency and with no intention of returning to their native country. They are charged resident tuition.

Further information on residency classification is available from the records and registration office.

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 may accompany the student. Most of the 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, general education advisors explain the programs available and usually urge exploration of a variety of courses as the student fulfills Associate in Arts degree requirements. Students acquire a better knowledge of various academic areas and are better able to make an informed choice of a major and a four-year college to attend. Unless a student enters a highly specialized field, there is usually no problem in remaining undecided for at least the freshman year.

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 Orientation to College (if offered).

ACADEMIC SUPPORT PROGRAMS

Once the first term begins, students quickly discover the extent of the commitment to their growth at Iowa Lakes Community College. The faculty is committed to advising and assisting students and a number of support programs serve specific academic needs.

Advisors

Advisors guide students in their programs and in achieving educational goals. Students are encouraged to visit advisors frequently. Regular meetings are scheduled to assist in the academic planning process.

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 services 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.

Writing Lab

The college has established writing laboratories at Iowa Lakes sites to help students with writing and English skills. These labs were established with a federal Title III grant.

All of these programs are designed to supplement classroom work and attendance and to help students to succeed.
STUDENT ASSISTANCE SERVICES

College Counseling Services

Through Student Services the college provides support and assistance. Access to professionally trained specialists for personal, vocational and social counseling is provided in addition to educational counseling. 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 Success Center counselor.

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

At Emmetsburg, a residence hall is available at the south end of the campus. On the Estherville campus, apartments and residence hall facilities are available adjacent to the student center or near the campus. Inquiries may be directed to the campus housing office.

Private apartments, rooms and rental homes are available in Estherville and Emmetsburg for single and married students.

Student Centers

The student centers at Emmetsburg and Estherville are the social, cultural and recreational hubs of the college. Meeting rooms, television and game areas are provided. Student lounge areas are available at Algona, Spencer and Spirit Lake. The student centers offer a wide variety of food services, ranging from café service and cafeteria meals to catered meals for dinners. Breakfast, noon and evening meals are served Monday through Friday. A food service advisory board makes recommendations to the food service staff.

Campus Housing and Food Service Refunds

Students living in campus housing units who withdraw from school, 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 by the college food service at Emmetsburg and Estherville. Weekend meals are available on request. Meal cards may be purchased by those students without a meal contract who do not wish to carry cash. Cash is always accepted, of course.

College Stores

Textbooks, sundries, emblematic clothing, glassware, gifts and school supplies for the college student are available at the college bookstores in Emmetsburg and Estherville. A textbook buy-back service is included. E-mail sales are available on the college website. The college stores also provide textbook services to the centers, both on site and by mail.

Parking

Since Iowa Lakes is essentially a commuter college, large parking lots are available. Parking for the handicapped is provided. Parking signs and regulations are enforced and tickets are issued for parking violations. Vehicles parked in restricted areas or in other than designated stalls may be towed at the owner’s/driver’s expense.

Accident Insurance

Health and accident insurance is available to students at a reasonable cost. Coverage may either be limited to school hours or provided on a full-time basis. Students are encouraged to obtain this protection unless they have adequate protection through other insurance coverage. Application forms are available in the business offices.

Placement

Instructor/coordinators of programs assist graduates in finding full-time jobs on completion of their programs. The financial aid office coordinates information concerning part time jobs on campus for qualified students while they are attending Iowa Lakes.

Follow-up

The college conducts follow-up studies of graduates in order to ensure that instructional programs and courses are relevant to student needs and that students are adequately prepared for further educational study or entry into the world of work.

FINANCIAL AID

The purpose of financial aid is to make it possible for students to complete their chosen educational programs who would be unable to do so without some form of financial assistance.
All financial aid is awarded through the financial aid office. Students interested in, or in need of, financial assistance must complete all admission requirements. The Free Application for Federal Student Aid (FAFSA) must also be submitted.

FAFSA application forms are available from the college financial aid office and from high school counselors. Students are encouraged to file early because resources allotted to the college may not be adequate to meet all needs.

Pell Grant
The Pell is a direct assistance grant to students and is the base around which all forms of financial aid are provided. Guidelines established by the federal government help determine the size of the grant.

Supplemental Educational Opportunity Grant (SEOG)
The SEOG may be available to students with critical financial needs as a supplement to other forms of financial aid and to help offset educational costs.

Stafford Loan
This program provides assistance to students needing help in financing education by providing aid in the form of loans through hometown banks, savings and loan associations, and credit unions. Students may borrow up to $2624 per year while in freshman status. After completing 30 credits, $3500 per year is available. The repayment period and interest accumulation begins six months after the student ceases to be at least a half-time student.

Supplemental Loans for Students (SLS)
Under the SLS program, eligible independent undergraduates may borrow up to $4000 per academic year, with an aggregate loan maximum of $20,000, not including amounts borrowed under the GSL or PLUS programs.

Parents 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.

College Work-Study (CWS)
The college work-study program is available to students with critical financial need to supplement other forms of financial aid and to assist in financing educational expenses. Students may work up to 10 hours per week while attending classes full time.

State of Iowa Scholarships
Iowa Lakes participates in the State of Iowa scholarship program, available to Iowa residents only. A Student Aid Report (SAR) from the FAFSA is required. Students should also complete an Iowa Lakes scholarship application to apply for other sources of aid.

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, Job Training Partnership Act (JTPA) and very limited Social Security benefits.

Scholarships
A number of scholarships are available at Iowa Lakes Community College. These include Albee, Sanborn, Century Club and Presidential scholarships. 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 of the scholarships. Other scholarships are available to students through local civic and community organizations.

Satisfactory Progress Procedure
Once a student establishes eligibility to participate in the federal, state and Iowa Lakes financial aid programs and is assigned funds from these programs, the student agrees to make satisfactory progress toward the completion of the designated program of study. The college is directed by federal and state governments to establish an institutional policy which will monitor academic progress. Information on the Iowa Lakes policy is available from the financial aid office at the Emmetsburg campus.

PRESIDENTIAL SCHOLAR HONORS PROGRAM
Freshman applicants to Iowa Lakes recognized as honor students in high school and second year college students who have a cumulative average of 3.50 or above are invited to be members of the Presidential Scholars Program. Membership guarantees financial assistance through scholarships ranging from $100 awards to full tuition reimbursement. Members of the program gather periodically during the year to plan and take part in cultural, intellectual and aesthetic activities, are invited to become members of the Upper Midwest Honors Council, and are also advised to register for honors courses which will be identified as such on their transcripts. Students completing six honors courses over the two years will also be recognized as Presidential Scholars at commencement exercises. Some restrictions apply in this program.

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 the Emmetsburg campus when needed.

Athletics
The athletics program at Iowa Lakes Community College is an integral part of the total educational program. The pro-
gram 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 all centers.

**Intramurals**

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.

**Communications**

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 a daily news broadcast and a radio music show over a local cable television channel.

**Music**

The college offers both vocal and instrumental music organizations in which students may participate. Among these are the concert band, stage band, concert choir and swing choir. The college also sponsors invitational swing choir 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 full listing of organizations appears in the student handbook.

**Student Government**

The Student Senate is the governing body for students at the college. Through its work, students are provided an opportunity to participate in the operation of the college. The senate’s objectives are to provide comprehensive activity programs for the student body, to address issues brought before it by the students represented, to encourage interaction between students at the various attendance centers, to provide leadership in issues of citizenship and student rights, and to administer the student activity fee (with the consent of the board of trustees of the college).

**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), requires 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 athletes. This information is also published in the Student Handbook.

**Institutional Record of Student Complaints**

To comply with federal regulations, the college maintains records of the written and signed formal complaints filed with the offices of the Vice President for Administration, the Executive Deans or the Associate Deans. These records will be maintained in the office of the Associate Dean of Student Services at the Estherville Campus.
STUDENT RESPONSIBILITY FOR CATALOG INFORMATION

Each student is responsible for information appearing in this catalog, in the Student Handbook and in each term’s class schedule. Failure to read the regulations and other information will not be considered an excuse for non-compliance.

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.

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, technical, vocational or adult education areas. The following degrees are awarded for college credit two-year programs: Associate in Arts, Associate in Science and Associate in Applied Science. Diplomas are awarded for college credit vocational 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 in courses taken at Iowa Lakes before graduation.

Certificates are awarded for completion of certain course sequences and some community and continuing education courses and programs.

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 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 degree, a student must:

• Earn a minimum of 64 semester credits, of which not more than 16 may be vocational-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 (9 credits):
EN113A English Composition I ........................................ 3 cr.
EN123A English Composition II ........................................ 3
SP103A Speech Fundamentals ........................................... 3

Science (8 or more credits from):
SC105A Anatomy and Physiology ...................................... 3
SC114/115A Biological Science Survey ............................... 3,4
EV114A Environmental Studies I ...................................... 4
SC121A Prairie Heritage Workshop ................................... 1
SC124/125A Physical Science .......................................... 3,4
SC133A Environmental Ecology ....................................... 3
SC134/135A Earth Science ............................................ 3,4
SC140A Meteorology ................................................... 4
SC174/175/176A Introduction to Chemistry I ........................ 3,4
SC179A General Chemistry I ......................................... 5
SC184A General Physics ............................................... 4
SC185A General Physics II .......................................... 4
SC220A Biology I ..................................................... 4
SC230A Biology II .................................................... 4
SC240A Human Anatomy and Physiology ........................... 4
SC248A Microbiology .................................................. 4
SC265A Field Biology .................................................. 4
SC270A Human Physiology ............................................ 4
SC271A Human Anatomy ............................................... 4
SC284A Engineering Physics I ...................................... 5
SC285A Engineering Physics II ...................................... 5

Mathematics (5 or more credits from):
MA103A Mathematics for General Education ...................... 3
MA112A College Algebra ............................................. 3
MA293/294A Calculus .................................................. 3
MA292/294A Business Calculus ......................................... 3,4
MA115A College Mathematics ......................................... 5
MA125A Analytic Geometry and Calculus ........................... 5
MA153A Finite Mathematics ........................................... 3

Social Science (9 credits from two or more areas):
I SS146A Western Civilization* ...................................... 3
SS147A Western Civilization* ...................................... 3
SS263A Classical Heritage* ......................................... 3

II SS156A American History .......................................... 3
SS157A American History ........................................... 3

III PY113A General Psychology ...................................... 3
PY213A Social Psychology ........................................... 3

IV BS113A Macroeconomics .......................................... 3
BS123A Microeconomics ............................................. 3

V SS113A Introduction to Sociology .................................. 3
SS123A Social Problems ............................................. 3

VI SS143A American Government .................................... 3
SS153A State and Local Government ................................ 3

VII SS103A Introduction to Political Science ....................... 3
SS163A World Regional Geography .................................. 3
SS223A Marriage and Family ........................................ 3
SS256A History of Iowa .............................................. 3
SS273A Minority Culture ............................................. 3
SS277A Cultural Anthropology ...................................... 3
SS280A Global Perspective* ......................................... 3

VIII BC101A Mass Media and Society* ............................. 3

Humanities (9 credits from two or more areas):
I ED203A Children’s Literature ..................................... 3
EN213A American Literature ........................................ 3
EN223A American Literature ......................................... 3
EN233A Intro to Short Story ........................................ 3
EN253A World Literature ............................................. 3
EN263A World Literature ............................................. 3
SP114A Introduction to Theatre ..................................... 3

II MU103A Music Appreciation ..................................... 3
MU213A Jazz History and Appreciation ............................ 3

III AR103A Art Appreciation ........................................ 3

IV PH103A Introduction to Philosophy .............................. 3
PH104A Introduction to Ethics ........................................ 3
PH203A Great Religions of the World .............................. 3
SS263A Classical Heritage* ......................................... 3

V Foreign Language (any) ............................................ 4-

VI SS146A Western Civilization* ...................................... 3
SS147A Western Civilization* ...................................... 3

VII BC101A Mass Media and Society* ............................. 3

Computers (proof of literacy such as a high school course or any other computer course) ..................... 0-3

Electives to bring total to 64 semester credits

*Can be used toward either social science area requirement or humanities area requirement, but credits cannot be used in both areas.

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 credits of the student totals 60 or more semester credits. Completion of the assessment is a requirement for graduation. The student will not be charged the cost of assessment.

Associate In Science degree requirements
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-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:

**Communications** (6 credits):
- EN113A English Composition I .........................3 cr.
- SP103A Speech Fundamentals .............................3

**Science** (4 credits)
- (Select from A.A. degree science courses) .................4

**Mathematics** (3 credits)
- (Select from A.A. degree math courses) ..................3

**Social Science** (6 credits from two areas):
- (Select from A.A. degree social sciences courses, except economics) ................................................3-3

**Humanities** (3 credits):
- (Select from A.A. degree humanities courses) .............3

**Business** (3 credits):
- (Any business course [course number ending with ‘A’] or any introductory computer or computer programming course [course number ending with ‘A’]) 3

**Associate in Applied Science degree requirements**

The A.A.S. 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 36 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 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.

**Alternative High School and 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.

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 35 or above on each of the five tests in the GED (General Educational Development) test battery and an average standard score of 45 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 from the coordinators at Emmetsburg, Estherville, Algona or Spencer.

**ACADEMIC INFORMATION**

**The Academic Year**

The academic year for college parallel consists of two semesters, beginning in August or September and in January, plus a summer session. The academic year for vocational-technical students normally consists of two semesters.
plus a summer term. Some courses are offered on a half-term basis and some are offered in very short time frames.

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 approximately one hour per week of lecture per semester, two hours per week of laboratory work per semester, or the equivalent.

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.

**Classification of Credit Students**

Students are classified in one of several ways:

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.

Part-time: a student carrying 11 or fewer credits of college work in a regular term.

**GRADING SYSTEM**

Grades are based on students’ levels of achievement in those courses in which they enroll. The following scale is used at Iowa Lakes:

- Grades for courses with attempted credits which count toward the grade point average (descriptions are below):
  - 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
- K: administratively withdrawn (appears as W on transcript)
- N: audit
- Z or NR: grade not reported by instructor

Grades are distributed to students by mail shortly after the end of each regular term.

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. The e-College period for accepting a change of grade is mid-term of the next semester.
- W: withdrawn: course formally dropped after the end of the first week of a term.
- K: administratively withdrawn: same as W but for administrative reasons rather than student initiative.
- N: audit: course taken for personal interest only; does not earn credits or grade. Must be elected during the first two weeks of a semester.
- 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. 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.
- T: credit granted for testing: does not count as attempted credit.
- L: credit granted by virtue of prior education or occupational experience: does not count as attempted credit.

**PROCEDURES FOR ACADEMIC CLASSES**

**Registration**

Registration consists of program planning, scheduling of classes 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. Pre-registration 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.

Students may enroll after the first week of classes and before the end of the second week in a term with the permission of the appropriate dean and the director of records and registration. Students may register for independent learning courses in the Success Center at any time.

**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 semester; 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 semester; after the first week of the semester, a ‘W’ grade is recorded for any course a student drops. Dates are pro-rated for shorter terms.

**Withdrawing from all classes**

A student may withdraw from all classes (drop out of school) at any time during the term. A “Withdrawal from College” form and an exit interview are normally completed. A refund of tuition may be made for withdrawals early in the term, according to a schedule published elsewhere in this catalog. After the first week of classes, a ‘W’ grade will be assigned for each course.

**Refund of tuition**

In the event that a student officially withdraws from the college, a refund of tuition will be made according to the following schedule for credit classes:

- During
  - the first week of the term (canceled), 100 percent
  - the second week (complete drops only) 60 percent
  - the third week (complete drops only) 40 percent
  - After the end of the third week, no refund

Refunds are calculated on total tuition paid; fees are not refunded. Refunds on courses shorter than a standard term in length or on non-standard calendars may be pro-rated. Refund monies may be used to repay financial aid advanced for educational expenses before any refund is issued to the student. Refund procedures, percentages and amounts may differ for first-time college students receiving federal financial aid.

The U. S. Department of Education has instituted a refund procedure for all Title IV financial aid recipients. Under this procedure, the institution is required to refund tuition, fees and other expenses to the lending agency or grant program on a pro-rata basis.

Campus housing and food service refund procedures are listed elsewhere in this catalog.

**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.

**New Start program**

The “New Start” program is a one-time option available to students who change programs of study after receiving unsatisfactory grades in a previous program at Iowa Lakes Community College, or 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 new program or the re-enrollment. All academic work completed at the college remains on the academic record even if the “New Start” is elected. Application forms and procedures are available from the director of records and registration.

**Repeating courses**

A student may repeat a course previously taken at Iowa Lakes. A form must be completed to notify the college of the repeated course. With the approval of the director of records and registration, only the last credits attempted and grade points earned in the repeated course will be used in calculating the cumulative grade point average. Earlier grades will remain on the record. An institution to which a student later transfers may apply its own policies to repeated courses. Dropping a course which is being repeated and receiving a grade of ‘W’ does not constitute repeating a course.

**Credit load**

Individuals pursuing 12 or more credits in a term are considered to be full-time students. A student will normally need to carry a greater number of credits in order to graduate in the normal period of time for a program. The maximum number of credits in which a student may enroll is determined by previous academic performance and program requirements. See the section of the catalog concerning academic probation and progress.
Class attendance, assignments and examinations

Students are expected to attend all class meetings for the courses in which they have enrolled. Any absence results in the loss of instruction and interferes with the learning process. Absence shall not lessen the student’s responsibility for meeting the requirements of any course and does not exclude a student from the responsibility for completion of work missed. The specific absence and make-up policies of each instructor are contained in course orientation information and/or the course syllabus. Students are encouraged to be aware of the amount of class time missed when considering participation in college activities.

Each instructor determines whether or not a final examination will be given in a particular course. If an exam is scheduled, students must be present as scheduled. In cases of illness or emergency during examination times, a student may be excused and the test rescheduled by the instructor. Where such illness or emergency extends beyond the end of the term, the procedure for incomplete work should be followed.

Tuition and fees

A schedule of tuition and fees is adopted by the board of trustees. Current costs are available from the admission offices at the Emmetsburg and Estherville campuses. Tuition and fees are due at the beginning of each term.

If a student is unable to pay tuition and fee charges in full, a deferred payment plan is available for an extra charge. Copies of the tuition and fee payment procedure are available from campus business offices or in the student handbook. VISA, MasterCard and Discover are currently accepted for payment of tuition, fees, books and other charges.

All funds owed the college must be paid prior to graduation.

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 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 MEANS OF OBTAINING 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 educational goals.

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. Credit granted at Iowa Lakes for test-out, 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.

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 time line 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 College Level Examination Program (CLEP), for general and certain subject examinations.
- 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.

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.

GRADUATION

Commencement ceremonies are held at the end of the spring and summer terms. A student who plans to graduate at the end of a term must apply by completing a form at the records and registration office no later than the published deadline date which appears in the class schedule.

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. Part-time students who have accumulated 12 or more credits at Iowa Lakes Community College during consecutive semesters with at least a cumulative grade point average of 3.25 or higher will be recognized for their academic achievement. The lists are released to area news media.

A program to honor part-time students has also been developed.

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

Graduation honors are also posted on the academic record based on the final cumulative GPA.

ACADEMIC STANDARDS

Academic Probation

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 covered elsewhere in college publications.

Student Status

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. 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 a Success Group (or an alternative assignment approved by the Success Group 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 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 statuses 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 a probationary status.

Credit Loads

Credit load limit: a student is limited to 18 credits or less if his or her GPA last term was between 1.50 and 1.99, or to 12-14 credits or less if his or her GPA last term was less than 1.50.

ACADEMIC, FINANCIAL AID AND RESIDENCY APPEALS

It is the desire if 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 advisor, instructors or school administrators 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 procedure may be asked of the director of records and registration (registrar), who also handles changes of residency for tuition purposes.

If a student feels that extenuating circumstances might justify the waiver of a particular college college policy, application, procedure or regulation 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 and 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 student initiates an appeal by making a written statement to the academic review committee, delivered to the director of records and registration. 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.

If the committee’s decision is adverse, 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 notification of the committee’s action will result in the committee’s last decision becoming final.

COURSE LOADS

Developmental studies courses, if required, add an extra load to student requirements and may extend the program of study and/or require attendance at summer sessions.

PRIVACY OF RECORDS

The Family Educational Rights and Privacy Act of 1974 requires that institutions will maintain the confidentiality of student education records.

Academic records will not be released to another person or organization except with the written permission of the student (or parents, if the student is a minor enrolled in high school credit courses). Exceptions are staff members of Iowa Lakes with a need to know, officials of other institutions where the student seeks to enroll, accrediting agencies carrying out the accreditation function, a judicial order, agencies from which the student has received financial aid and their agents, or to persons in an emergency in order to protect the health and safety of students or other persons.

Directory Information:

Iowa Lakes considers the following to be directory information and may release it unless the student requests the college not to 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 by credits or level, 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 (registrar). 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. A request to withhold any item of
directory information will normally result in the college withholding all information. Students not currently enrolled may not initiate a request to restrict directory information. Directory information is released only on an individual basis; lists of students are not available.

**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 on written request by the student. Forms for this purpose are available in the records and registration offices at the Emmetsburg and Estherville campuses; a signed letter is also satisfactory. Transcripts are not released if the student has an overdue financial obligation to the college.

Transcripts are available from the Emmetsburg or Estherville campus last attended by the student; records for off-campus centers are generally kept at Emmetsburg.

The first transcript is issued free of charge; a fee is charged for each additional request. Special services incur additional charges.

**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. An official transcript of Iowa Lakes work should be sent to the transfer institution when the school asks for it.

Students who plan to complete the AA degree and 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. In addition, some schools are now requiring a foreign language and some require that science courses include laboratory work. Students who take college-level work as high school students and who use the credit toward high school graduation requirements should be aware that some colleges will not also allow that credit to count toward a college degree.
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. The division has organized a comprehensive schedule which provides area residents with the opportunity to participate in programs and activities which meet their needs. Working directly with communities and local schools, the division provides short courses, programs, seminars and community service activities 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.

ALTERNATIVE HIGH SCHOOLS

An alternative high school is an excellent chance for young adults between the ages of 16 and 21 to earn a high school diploma. Students are offered flexibility in a non-traditional setting, but enrollment is limited. When requirements have been completed, students are awarded a high school diploma. There is no cost to students, and classes are located at Algona, Emmetsburg, Estherville and Spencer.

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.

VOCATIONAL SHORT TERM PREPARATORY PROGRAMS

Certified Nurse Assistant (75 hours): this course prepares students to work in a long-term care facility and includes basic nursing skills, information on the aging process, necessary attitudes and understandings of the duties of such a job. Fulfills the requirements for certification as a Nurse Assistant I. This course is available for 3 college credits as HO102A.

Nurse Aide Level II: this 60 hour program assists in developing skills and attitudes necessary to be an effective nurse assistant in a hospital environment. Classroom and clinical experience are combined. People who have completed the 75 hour Certified Nurse Assistant may apply those hours toward this course. This course is available for 3 college credits as HO103A.

EMT-A Emergency Medical Technician Basic: the total course consists of classroom and in-hospital observation and training, examinations and a recommendation of completing five emergency ambulance runs. The course develops student skills in the recognition of symptoms of illnesses, injuries and proper procedures for emergency care. This follows the national Department of Transportation curriculum. It may be taken for academic college credit as HO105A and HO101A.

EMT-I Emergency Medical Technician Intermediate: this is the first classification for advanced emergency medical technician certification. At this level, the student gains a more in-depth knowledge of certain body systems and assessments. Two skills are added, intravenous therapy and advanced airway devices. EMT-Basic certification is required for enrollment. College credit is available as HO202A and HO203A.

Activity Directors Orientation Program: this 60 hour program assists in developing the skills needed to be able to reach every segment of the nursing facility population and to conduct a comprehensive activity program.

First Responder: the First Responder serves as a vital link in the chain of the health care team. This curriculum includes skills necessary for the individual to provide emergency medical care with a limited amount of equipment. This course is listed for college credit as HO123C.

Supervision in Health Care: the 40 hour course is designed to assist nurses in gaining knowledge and developing skills useful in managing personnel and client care. The course is offered for college credit as HO152C.

Medication Aide: this 50 hour course prepares Nurse Aides/Residential Attendants to administer oral medications in long-term care facilities if they meet course requirements of the Iowa Department of Public Health. The course is offered for college credit as HO142C.

Rehabilitation Aide: this 60 hour course prepares persons who are working as nurse assistants with the knowledge and skills to safely and effectively provide rehabilitative therapies under the direction of physical or occupational therapist. The course is offered for college credit as HO143C.

Real Estate Salesperson Prelicense: this 60 hour course is approved by the Iowa Real Estate Commission as an accredited 60 hour real estate salesperson prelicense class. This program has been developed to better prepare prospective licensees to enter the real estate profession and to pass the State of Iowa exam. It may be taken for 3 hours of college credit (as BS284A) or as noncredit.
COMMUNITY SERVICE AND SERVICE LEARNING

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

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

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.

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 and Iowa Lakes students for whom English is their second language. Emphasis is on English for daily living, on-the-job language requirements and course work content comprehension.

EXTENDED LEARNING

Weekend College

Weekend college is for adults who are unable to attend college credit classes during the week, day or evenings, because of their personal schedules. Offered at the Spencer Center, these classes include liberal arts, business and health care administration programs. Associate in Arts and Associate in Science degrees are awarded as appropriate.

Evening College

Evening college meets in Algona, Spencer, Spirit Lake, Emmetsburg and Estherville. Adults who are unable to attend day classes have the opportunity to complete the requirements for an Associate in Arts degree in approximately two and one-half years of attendance in evening classes. Some evening classes are offered in eight week blocks.

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.

Online Learning

Education to Go: A selection of courses can be taken online, with only the basic requirements of having a computer, Internet access and the software applicable to the course selection. Courses are offered monthly and run for six weeks. Each course consists of 12 lessons, with two lessons posted to the student e-mail address weekly. Courses are offered for one semester hour of college credit (Pass/no credit grading) or non-credit. Further course information is available at http://www.ed2go.com/iowalakes.

E-College: As part of a consortium of seven Iowa community colleges, Iowa Lakes offers an Associate in Arts degree entirely over the World Wide Web. This is a cooperative degree program known as as the Iowa Community College Internet Consortium (ICCIC). Students select one of the consortium member colleges as a home college for registration, financial aid and student support purposes.

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 at Emmetsburg or Spencer. To apply for admission to the UI College of Nursing, a student must be licensed as a registered nurse and must have completed all prerequisites to the nursing major with a minimum GPA of 2.50.

Classes are offered by UI at Iowa Lakes through a variety of methods including videotape presentations, teleconferencing, guided correspondence study, and regular classroom and clinical instruction. 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 (which may be in addition to the requirements imposed by the Act itself).

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

a. college application for admission
b. official high school transcript
c. ASSET or COMPASS scores
d. “Notice of student registration” form
e. college registration form

Students enrolling for the second and subsequent terms at Iowa Lakes need only complete the “Notice of student registration” form and college registration form.

ASSET or COMPASS must be passed at an acceptable level or students will not be allowed to take college classes. 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 upgrade basic skills the student may enroll in Iowa Lakes developmental classes, but not regular college classes, until the required developmental courses have been completed satisfactorily.

Students must register in person each term at the Iowa Lakes center they plan to attend at Emmetsburg, Estherville, Algona, Spencer or Spirit Lake.

Under the Postsecondary Enrollment Options Act, the local school district may provide up to $250 for the cost of each course including tuition, textbooks, materials, and fees.

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.

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.

In addition, GED classes are offered in a classroom setting for older adults.
A student completing an Associate in Arts degree will complete 40-43 credits of required subjects and 21-24 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 in the following fields:

Offered at Emmettsburg and Estherville

Accounting
Biology
Business
Business Administration
Business Education
Education
General Studies
History
Horticulture
Pre-Mortuary Science

Pre-Nursing
Physical Science
Pre-Physical Therapy
Political Science
Psychiatric Social Worker
Psychology
Secretarial
Sociology and Social Work
Spanish

Offered only at Estherville

Art
Astronomy
Chemistry
Pre-Chiropractic
Communications Studies
Computer Science
Pre-Medicine
Music/Music Education
Pre-Counseling
Pre-Dentistry
English/Speech
Pre-Engineering
Theater Arts
Pre-Veterinary Medicine

Geology
Home Economics
Pre-Law
Pre-Library Science
Mathematics
Medical Technology
Meteorology
Oceanography
Pre-Optometry
Pre-Pharmacy
Physical Education
Physics
Fish and Wildlife
Forestry

Offered only at Emmettsburg

Agriculture

Animal Science

Offered only at Spirit Lake

Athletic Trainer
Human Resource Assistant
This program is intended to provide introductory agriculture courses to students who intend to transfer to an agriculture-related program at a four-year college or university. Students may substitute other courses for the agriculture course requirements with approval of the program coordinator.

Program requirements:
- General requirements for A.A. degree: . . . . . . .40-43 credits
- Specialty requirements: . . . . . . . . . . . . . . . . . . .14 credits

AT214A Introduction to Soils . . . . . . . . . . . . . . . . . . . . . .3
AT113A Animal Science . . . . . . . . . . . . . . . . . . . . . . . . . .3
AT124A Crop Production . . . . . . . . . . . . . . . . . . . . . . . . . .3
SC174A, 175A Introduction to Chemistry I, II . . . . . . . . .8
  (can count as general requirements)
AT218A Animal Nutrition . . . . . . . . . . . . . . . . . . . . . . . . .3
Electives to total 64 credits . . . . . . . . . . . . . . . . . . . . . . . .7-9 credits

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 areas listed below. Total credits listed as required are minimums.

Administrative Assistant
Aviation/Airport Management
Broadcast Media Specialist
Business Administration and Management
Computer Aided Drafting Design

Computer Specialist
Criminal Justice
Early Childhood Education
Environmental Studies
Geographic Information Systems Technology
Graphic Design and Technology
Health Care Administration
Human Services/Disability Studies
Information Technology
Journalism/Photography
Legal Assistant
Recreation Specialist
Sales and Marketing Management
Travel and Tourism

Administrative Assistant 68 credits

Associate in Science Degree
Location: Emmetsburg and Spencer Campuses

Employers hiring administrative assistants or secretaries for management positions often require more than one year of training. This program adds a second year of general education and business requirements to the Office Specialist or Secretarial Specialist curriculum. Completion of this two-year program allows a graduate to seek work or transfer into a four-year college program.

Program requirements:
- General requirements for A. S. Degree: . . . . . . .25 credits
- Specialty requirements: . . . . . . . . . . . . . . . . . . .31-34 credits

Business Core:
BE111A Calculating Machines . . . . . . . . . . . . . . . . . . . . . .2
BA103A Basic Accounting OR
BA113A Principles of Accounting I . . . . . . . . . . . . . . . . . .3
BE113A Keyboarding Applications . . . . . . . . . . . . . . . . . . .3
BE118A Office Procedures . . . . . . . . . . . . . . . . . . . . . . . . . .3
BE119A Word Processing . . . . . . . . . . . . . . . . . . . . . . . . . . . .3
BE235A Administrative Assistant Practicum . . . . . . . . . . .5
BS106A Introduction to
Computers/Information Systems . . . . . . . . . . . . . . . . . . . . .3
  (can count as general requirement)
Business electives: (select three courses from the following

21
or from business electives approved by advisor)
BS105A  Web Page Design  .......... 3
BS113A  Macroeconomics .......... 3
BS263A  Legal Environment of Business .......... 3
BS293A  Management .......... 3
IT110A  Introduction to Computer Hardware/
   A+ Certification .......... 3
IT115A  Networking Essentials .......... 4
IT116A  Windows NT Core Technologies .......... 4
IT119A  Windows NT Administration .......... 4
Electives: ......................... 6-12 credits

Aviation/Airport Management  68 credits

Associate in Science Degree

Location: Estherville Campus

This program offers training in aviation, including two full years of college education which can be transferred to programs at four-year colleges. Students who complete the program will learn Private, Instrument, Commercial, and Certified Flight Instructor certificates from the FAA. Flight training is offered at the Estherville Airport by Iowa Lakes Community College instructors in college-owned aircraft.

Program requirements:
General requirements for A. S. Degree:  .... 25 credits
Specialty requirements:  ......................... 26 credits
AV101A  Private Pilot Flight Laboratory I  .......... 3
AV102A  Private Pilot Ground School  .......... 4
AV103A  Commercial Cross-country Flight Lab .......... 3
AV105A  Commercial Pilot Ground School .......... 3
AV201A  Commercial Instrument Pilot Flight Lab ..... 3
AV202A  Instrument Ground School  .......... 3
AV203A  Flight Instructor Flight Lab OR
   AV206A  Multi-engine 3
   AV204A  Flight Instructor Ground School OR
   a general elective  .......... 3
AV207A  Aviation Practicum OR
AV205A  Instrument Instructor  ......................... 1
Other requirements:  ......................... 3-6 credits
One course from the following:
   (satisfies business/computers requirement)
CS105A  General Computer Applications
BE119A  Word Processing
BS103A  Computer Applications in Business
BS106A  Intro to Computers/Information Systems  .......... 3
One course from the following:
BS223A  Personnel Management
BS293A  Management
BS213A  Small Business Management
BA103A  Basic Accounting  ......................... 3
Electives: to total 68 credits...8-11 credits
Recommended electives:
AV238A  Multi-engine Rating  ......................... 3
AV205A  Instrument Flight Instructor Lab  .......... 1
SC184A  General Physics I OR
SC140A  Meteorology  
   (satisfies science requirement)  ......................... 4
Broadcast Media Specialist  68 credits

Associate in Science Degree
Location: Estherville Campus

The broadcast media specialist program is designed for those interested in working for radio or television stations, newspapers and advertising publications.

Program requirements:
General requirements for A. S. Degree:  . . . . . . .25 credits
Specialty requirements:  . . . . . . . . . . . . . . . . .29-38 credits
BC101A Mass Media and Society  . . . . . . . . . . . . . . . . . .3 (can count as general requirement)
BC112A Public Relations  . . . . . . . . . . . . . . . . . . . . . . . . . .3
BC200A Sophomore Portfolio  . . . . . . . . . . . . . . . . . . . . . . . . . .0
BC202A Writing for the Media  . . . . . . . . . . . . . . . . . . . . . . . .3
BC203A Audio Production  . . . . . . . . . . . . . . . . . . . . . . . . . .3
BC223A Advanced Video Editing  . . . . . . . . . . . . . . . . . . . .3
BC212/232A Practicum  . . . . . . . . . . . . . . . . . . . . . . . . . . . .2/5
BC221A Television Studio Production I*  . . . . . . . . . . . . .3
BC241A Television Studio Production II  . . . . . . . . . . . . .3
BC243A Electronic Field Production I*  . . . . . . . . . . . . .3
BC253A Electronic Field Production II  . . . . . . . . . . . . .3
BS143A Sales Principles OR
BS243A Advertising  . . . . . . . . . . . . . . . . . . . . . . . . . . . .3 (satisfies business/computers requirement)
J1R53A Beginning Newswriting OR
JR213A Media Law and Ethics  . . . . . . . . . . . . . . . . . . . . . . . . . .3
*The following course may substitute for either course:
BC234A Radio Workshop  . . . . . . . . . . . . . . . . . . . . . . . . . .4
Electives to total 68 credits:  . . . . . . . . . . . . . . . . . . . . . . . . . .5-14 credits

Business Administration and Management  69 credits

Associate in Science Degree
Location: Estherville Campus and other locations

This program has a core of liberal arts courses, a core of business courses and a group of specialized courses in the chosen option.

The Small Business Management option is designed for students who want comprehensive training in the areas of business administration and business management and who wish to enter employment or transfer to a four-year college after graduation. Students entering the work force may qualify as departmental supervisors, management trainees, store operators and managers, sales supervisors, personnel officers, or bank employees.

The Leadership Management option is designed for industrial leadership training programs for employers and employees in the college area. A Leadership Management certificate is also available.

Program requirements:
General requirements for A. S. Degree:  . . . . . . .25 credits
Business core requirements:  . . . . . . . . . . . . .27-30 credits
BA113A Principles of Accounting I  . . . . . . . . . . . . . . . . .3
BA123A Principles of Accounting II  . . . . . . . . . . . . . . . . .3
BE101A Keyboarding  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .2
BE111A Calculating Machines  . . . . . . . . . . . . . . . . . . . . . . . . . .2
BS106A Introduction to Computers/Information Systems  . . . . . . . . . . . . .3 (can count as general requirement)
BS113A Macroeconomics  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .3
BS123A Microeconomics  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .5
BS205A Business Practicum  . . . . . . . . . . . . . . . . . . . . . . . . . .5
BS253A Entrepreneurship  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .3
BS263A Legal Environment of Business  . . . . . . . . . . . . . . . . . . .3

Leadership Management option requirements:  . . . . . . .17 credits
Location: college-wide on demand
BS107A Supervision  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .3
BS109A Interpersonal Skills at Work  . . . . . . . . . . . . . . . . . . . .2
BS117A Leadership Development  . . . . . . . . . . . . . . . . . . . . . . . .3
BS118A Managing Change  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .1
BS127A Managing for Quality  . . . . . . . . . . . . . . . . . . . . . . . . . .3
BS128A Employee Training  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .1
BS131A Leadership Seminar I  . . . . . . . . . . . . . . . . . . . . . . . . . .1
BS137A Time Management  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .1
BS138A Stress Management  . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .1
BS141A Leadership Seminar II  . . . . . . . . . . . . . . . . . . . . . . . . . .1
Small Business Management option

requirements: ..............................................17 credits

Location: Estherville Campus
BS111A Business Seminar I ..................................1
BS121A Business Seminar II ................................1
BS143A Sales Principles ..................................3
BS213A Small Business Management ..................3
BS233A Marketing ........................................3
BS243A Advertising .......................................3
BS283A Real Estate .......................................3

Computer Aided Drafting and Design

68 credits

Associate in Science Degree

Location: Estherville Campus

This program trains people for immediate employment in technical computer graphics fields or enables them to transfer to a four-year institution. Since the rapid transfer of technical information via computer graphics is essential to a wide variety of businesses, industries and institutions, many CADD applications are emerging on the employment horizon.

Program requirements:
General requirements for A. S. Degree: ...............25 credits
Specialty requirements: ...............................25-28 credits
CD114A Technical Drafting and Computer Aided Drafting (CAD) I ..........................4
CD124A Technical Drafting and Computer Aided Drafting (CAD) II ......................3
CS124A Computer Science I OR CS223A Computer Programming in ‘C’ OR
CD205A CADD Practicum ........................................5
CD206A CADD Seminar ........................................1
CD213A Drafting Applications and CADD ........................................3
CD224A Design Applications and CADD ........................................4
CD233A Applied Mathematics and CADD Techniques ......................................2
Co-requisites: ...............................................7-16 credits
BS106A Introduction to Computers/Information Systems ....................................3
OR CS113A Introduction to Data Processing ........................................3
OR CS124A Computer Science I ..........................................3
OR CS233A Database Information Systems ..........................................3
MA115A College Mathematics ..................................5
(can count as general requirement)
SC184A General Physics I ....................................4
(can count as general requirement)
SC185A General Physics II ....................................4
(can count as general requirement)
Electives to total 68 credits: .........................0-11 credits

Computer Specialist

68 credits

Associate in Science Degree

Location: Estherville Campus

The Computer Specialist program allows students to emphasize either business or mathematics-science areas depending on course selection during enrollment at Iowa Lakes. Graduates may seek employment as computer programmers for business, industry, government or scientific applications, or may transfer to a four-year college for further training.

Program requirements:
General requirements for A. S. Degree: ...............25 credits
Specialty requirements: ...............................26-32 credits
CS113A Introduction to Data Processing ..................3
(can count as general requirement)
CS124A Computer Science I ......................................3
CS235A Computer Specialist Practicum ..................5
CS236A Computer Science II ......................................3
CS263A Problem Solving Logic .............................3
Select one of the following:
CS213A Computer Programming-COBOL OR
CS283A Computer Programming-RPG II ..................3
Select three courses from the following:
CS223A Programming in ‘C’ ......................................3
CS233A Database Information Systems ..................3
GT113A Introduction to GIS ......................................3
IT___A any IT courses ........................................3 or more
Co-requisites: ...............................................7-10 credits
MA103A Math for General Education OR
MA153A Finite Mathematics ...................................3
(either can count as general requirement)
BA113A Principles of Accounting I ....................3
MA294A Statistics ...........................................4
Electives to total 68 credits: .........................1-10 credits
Criminal Justice

Associate in Science Degree
Location: Estherville Campus

The criminal justice field includes several career areas in addition to that of police officer. These include corrections and private security. Students may enter several employment fields or transfer to a four-year college. The Iowa Lakes program is designed for full-time students or currently employed criminal justice personnel who wish to complete academic training. Field experience is taken in various agencies within the criminal justice system.

Program requirements:
General requirements for A. S. Degree:  . . . . . . .25 credits
Criminal Justice core (all students):  . . . . . . . . . . .15 credits
CJ113A Introduction to Criminal Justice . . . . . . . . . . . . . .3
CJ123A Juvenile Delinquency . . . . . . . . . . . . . . . . . . . . .3
CJ126A Criminal Law and Procedure . . . . . . . . . . . . . . .3
CJ223A Drug Use and Abuse . . . . . . . . . . . . . . . . . . . . .3
CJ226A Criminology . . . . . . . . . . . . . . . . . . . . . . . . . . . .3

Select either option:  . . . . . . . . . . . . . . . . . . . . . . . . . .9-13 credits
Law Enforcement option requirements:
CJ101A Independent Study-Law Enforcement . . . . . . . . . . .1
CJ108A Firearms Training . . . . . . . . . . . . . . . . . . . . . . . .1
JR113A Introduction to Photography . . . . . . . . . . . . . . . . .3
CJ116A Introduction to Criminal Investigation . . . . . . . . . . .3
CJ121A Seminar I-Law Enforcement . . . . . . . . . . . . . . . . .1
CJ211A Seminar II-Law Enforcement . . . . . . . . . . . . . . . . .1
CJ215A Police Operations and Procedures . . . . . . . . . . . . .3

Corrections option requirements:
CJ107A Independent Study-Corrections . . . . . . . . . . . . . . .1
CJ128A Criminal Justice Seminar I-Corrections . . . . . . . . . . .1
CJ213A Introduction to Corrections . . . . . . . . . . . . . . . . . . .3
CJ220A Corrections in the Community . . . . . . . . . . . . . . . .3
CJ228A Criminal Justice Seminar II-Corrections . . . . . . . . . . .1

Select 5 credits of field experience:
CJ202A Field Experience I-Law Enforcement . . . . . . . . . . .2
AND CJ203A Field Experience II-Law Enforcement . . . . . . .3
OR CJ205A/CJ206A Field Experience-Criminal Justice . . . . . .5/6
OR CJ232A Field Experience I-Corrections . . . . . . . . . . . . .2
AND CJ252A Field Experience II-Corrections . . . . . . . . . . . .3
Electives to total 68 credits:  . . . . . . . . . . . . . . . . . . . . .10-14 credits

Early Childhood Education

Associate in Science Degree
Location: Emmetsburg Campus

It is widely recognized that the first eight years of life are extremely important in the development of a child. This fact coupled with dramatic social and economic changes in recent years, leads to the importance of understanding what is necessary to provide quality early childhood care and education.

The program offers students the opportunity to take a variety of coursework as well as be involved in three practicum experiences in early childhood settings. Students gain a basic understanding of child development, child health, safety and nutrition, as well as broadening their backgrounds in general education and developing an awareness of current issues in the profession and of administrative processes. Students learn a variety of skills including observing, recording and guiding behavior; first aid and CPR; planning, preparing and presenting developmentally appropriate curriculum; advocating for early childhood issues; and administering early childhood programs. Students will complete a professional resource file, a personal portfolio and a card file of appropriate children’s activities throughout the program.

The program may be completed in two years or more depending upon student ability and personal situation. To advance in the program course sequence or to graduate, a student may have no grade lower than ‘C’ in any Child Care (CC prefix) course or in courses PE213A or ED203A. By completing the program, graduates can be employed in a position of responsibility such as a lead teacher or program coordinator working with primary grade children, preschoolers and infants or toddlers. Sites could include schools, child care centers, pre-schools, Head Start, Area Education Agencies, family day care homes, resource and referral centers, family or community service agencies, recreation centers or residential homes. Graduates may also transfer to a four-year institution for further education in early childhood education, elementary education, special education, or family and community services.

Program requirements:
General requirements for A. S. Degree:  . . . . . . .25 credits
Specialty requirements:  . . . . . . . . . . . . . . . . .40-49 credits
CC102A Child Growth & Development . . . . . . . . . . . . . .3
College Transfer & Career Option Programs

CC110A Child Care Professionals I .........................1
CC111A Child Development Study Tour .....................1
CC112A Child Health, Safety & Nutrition ..................3
CC114A Principles of Child Care ..........................3
CC120A Child Care Professionals II .......................1
CC121A Practicum I ........................................2
CC123A Play and Creative Arts for Children ..............3
CC124A Inquiry Activities ..................................3
CC125A Behavior and Guidance of Children ..............3
CC120A Early Childhood Professionals I .................1
CC121A Practicum II ........................................2
CC123A Contemporary Issues in Child Care ..............3
CC210A Early Childhood Professionals II .................1
CC221A Practicum III .......................................1
CC223A Administration of Programs for Children .......3
BS106A Introduction to Computers/Information Systems .3
(can count as general requirement)
ED203A Children's Literature .............................3
(can count as general requirement)
PE213A First Aid .............................................3
SS223A Marriage and the Family ..........................3
(can count as general requirement)
Electives to total 68 credits: ..............................0-3 cr.

Environmental Studies 68 credits

Associate in Science Degree
Location: Estherville Campus

This program emphasizes environmental science, biology,
chemistry, environmental technology and natural resources
management.

Program requirements:
General requirements for A. S. Degree: ..........................25 credits
Specialty requirements: ........................................22 credits
EV114A Environmental Studies I .............................4
EV124A Environmental Studies II .............................4
EV203A Environmental Seminar I ............................1
EV204A Environmental Seminar II ............................1
Take two courses from the following:
EV234A Introduction to Environmental Technology AND ...4
EV244A Environmental Technology Techniques OR ...4
EV254A Introduction to Natural Resources Management AND ...4
EV264A Natural Resources Management Techniques .......4
EV274A Environmental Studies Practicum ..................4

Required electives ...............................................12 credits
(Select 12 credits in science in addition to general requirement)
Recommended electives:
EN123A English Composition II .............................3
PH104A Ethics in America ....................................3
(can count as general requirement)
Electives to total 68 credits: .................................9 credits
Geographic Information Systems

Technician 68 credits

Associate in Science Degree
Location: Estherville Campus

Geographic Information Systems (GIS) is a technology that blends computer graphics, large databases, computer networks and the Internet. Geographic location, and information associated with that location, is important in people’s lives. Words and numbers from rows and columns in spreadsheets and databases are linked to locations with a GIS.

GIS technicians learn how to find and collect raw data from a variety of sources, transform it to match other data, query the data to answer questions and present information to other decision makers. GIS technicians learn how to use this new tool to solve problems. Job market demand for people with GIS training is estimated to be approximately 75,000 per year.

Program requirements:
General requirements for A.S. Degree: . . . . . . . .25 credits
Specialty requirements: . . . . . . . . . . . . . . . . .35-38 credits
GT113A Intro to GIS . . . . . . . . . . . . . . . . . . . . . . . . . . . .3
CD114A Technical Drafting & CAD I . . . . . . . . . . . . . . .4
GT123A GIS Applications I . . . . . . . . . . . . . . . . . . . . . . .3
CD124A Technical Drafting & CAD II . . . . . . . . . . . . . .3
CS138A Computer Programming . . . . . . . . . . . . . . . . .3
(can count as general requirement)
GT134A Fundamentals of Surveying - GPS, COGO . . . .4
GT133A Geography . . . . . . . . . . . . . . . . . . . . . . . . . . . . .3
GT223A GIS Land Information & Resource Management 3
GT153A Digital Cartography . . . . . . . . . . . . . . . . . . . . . .3
GT213A GIS Applications II . . . . . . . . . . . . . . . . . . . . . . .3
CS233A Database Information Systems . . . . . . . . . . . . .3
GT233A Photogrammetry and Remote Sensing . . . . . . .3
Other requirements: . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .6-13 credits
MA115A College Mathematics . . . . . . . . . . . . . . . . . . . . .5
(can count as general requirement)
MA294A Statistics . . . . . . . . . . . . . . . . . . . . . . . . . . . . .4
SC118A Ecology and Environmental Concepts . . . . . . .4
(can count as general requirement)
Electives . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .0-4 credits
Graphic Design and Technology

Associate in Science Degree
Location: Estherville Campus

This program trains individuals for employment or as freelance graphic artists in advertising and publishing firms. The on-the-job training period and development of a personal portfolio provide an excellent background for employment. General courses transfer to a four-year college.

Program requirements:
General requirements for A. S. Degree: .............. 25 credits
Specialty requirements: ......................... 43-49 credits
EN123A English Composition II ..................... 3
JR113A Photography ............................... 3
AR103A Art Appreciation ............................ 3
(satisfies humanities requirement)
BS105A Web Page Design .......................... 3
AR108A Electronic Publishing ........................ 3
(can count as general requirement)
AR117A Digital Illustration .......................... 3
AR119A Drawing I ................................. 3
AR128A Advertising Studio .......................... 3
AR133A Advertising Layout and Composition ....... 3
AR163A Adobe Photoshop® .......................... 3
AR173A Adobe Illustrator® .......................... 3
JR213A Media Law and Ethics ........................ 3
AR233A Design I .................................. 4
AR234A Graphics Internship .......................... 4
Electives: ................................... 0-5* credits

*Students who have completed the Graphic Design and Printing diploma may use the printing techniques courses in place of the electives.

Health Care Administration 68 credits

Associate in Science Degree
Location: Spencer Center (Weekend College)

This career option program is designed to prepare persons for licensure as nursing home administrators in Iowa. It is primarily for adults with previous work experience, ideally in the field of health or business. Concepts and knowledge gained in the program are applied to the specifics of health care administration, including human relations and services, community resources, financial control, physical plant and equipment, federal and state requirements, and other legal considerations.

A baccalaureate degree is now part of the requirements for professional licensure in Iowa. A student who does not have a bachelor’s degree can also work on that degree at an area college on an Iowa Lakes campus or center.

Program requirements:
General requirements for A. S. Degree: .............. 25 credits
Specialty requirements: ......................... 39-42 credits
BS106A Introduction to Computers/Information Systems ................................. 3
(can count as general requirement)
BA113A Principles of Accounting I .................. 3
BS293A Management ................................ 3
GR111A Communication with the Elderly ........... 3
GR123A Gerontology ................................ 3
HC111A Health Care Practicum I .................... 2
HC113A Health Care Administration I ............. 3
HC122A Health Care Practicum II .................... 3
HC123A Health Care Administration II ............. 3
HC132A Health Care Practicum III ................... 2
HC133A Health Care Administration III ............. 3
HC211A Health Care Accounting ..................... 1
HC212A Health Care Practicum IV .................... 2
HC222A Health Care Practicum V .................... 2
HC226A Legal and Political Aspects .................. 3
HC233A Health Care Practicum VI .................... 1
Human Services/Disability Studies

**Associate in Science degree**

**Location: Estherville Campus**

This program provides opportunities in the human services, disability services, education related and medically related careers. Students who elect to transfer to pursue a bachelor's degree may transfer to programs in social work, psychology, rehabilitation therapy, education, or medical technical careers. A student who completes the first year of the program with specified courses may be granted a paraeducational diploma.

Program requirements:
- General requirements for A. S. Degree: 25 credits
- Specialty requirements: 29-32 credits
- PY113A General Psychology 3 credits (can count as general requirement)
- HD116A Assessment and Instruction 3 credits
- HD123A Behavior Management 3 credits
- HD214A Services and Vocational Planning 4 credits
- HD224A Counseling Skills 4 credits
- Select six credits from:
  - HD212A HS/DS Internship 2 credits
  - AND HS234A HS/DS Practicum 4 credits
  - OR HS236A HS/DS Practicum 6 credits
- Select nine credits from:
  - ED126A Exceptional Persons 3 credits
  - PY123A Psychology of Adjustment 3 credits

Electives to total 68 credits: 11-14 credits
- HD206A Basic Sign Language 2 credits
- HD211A Independent Study 1 credit

Information Technology

**Associate in Science Degree**

**Location: Emmetsburg and Estherville Campuses**

This program is designed to train entry level network supervisors. Students will be given an opportunity to pass Microsoft® Certification Examinations leading to the Microsoft® Certified Engineer (MSCE) designation. Classroom and laboratory experiences will assist the certification process. Students completing the program can enter the workforce or continue on to a four-year college.

Program requirements:
- General requirements for A. S. Degree: 25 credits
- Specialty requirements: 39-44 credits
- AR118A Web Page Design 3 credits (can count as general requirement)
- BS106A Introduction to Computers/Information Systems 3 credits
- CS138A Computer Science I - Visual Basic 3 credits
- CS233A Database Information Systems 3 credits
- IT110A Intro to Computer Hardware/A+ Certification 3 credits
- IT115A Networking Essentials 4 credits
- IT116A Supporting Microsoft NT Core Technologies 4 credits
- IT119A Windows NT Network Administration 4 credits
- IT139A Information Technology Practicum OR IT140A Information Technology Practicum 3-5 credits
- IT204A Introduction to TCP/IP 4 credits
- IT230A NT Server in the Enterprise 4 credits
- Certification electives; select one course from:
  - IT208A Exchange Server Administration 4 credits
IT216A  Internet Information Server ........................................... 4
IT227A  System Administration for SQL ......................................... 4
IT243A  SNA Server Operations and Management .............................. 4
Electives: ................................................................. 0-3 credits

Electives: ................................................................. 0-3 credits

**Journalism/Photography** 68 credits

**Associate in Science Degree**

*Location: Estherville Campus*

This program prepares students for work on daily, weekly, monthly, or other publications. Job tasks include reporting, layout, composition, photojournalism, advertising, and public relations work.

Program requirements:
General requirements for A. S. Degree: ............... 25 credits
Specialty requirements: ......................... 31-37 credits
AR108A  Electronic Publishing ........................................... 3
AR117A  Digital Illustration OR
AR163A  Adobe Photoshop® ............................................... 3
BC101A  Mass Media and Society ........................................... 3
BS143A  Sales Principles OR
BS233A  Marketing OR
BS243A  Advertising ....................................................... 3
(can count as general requirement)
EN123A  English Composition II ........................................... 3
JR110A  Newspaper Lab I ..................................................... 2
JR113A  Introduction to Photography ..................................... 3
JR122A  Newspaper Lab II ................................................... 2
JR153A  Beginning Newswriting ........................................... 3
JR212A  Newspaper Lab III ................................................... 2
JR213A  Media Law and Ethics ............................................... 3
JR220A  Newspaper Lab IV ................................................... 2
JR234/236A Practicum ....................................................... 2/5
Electives: ................................................................. 6-12 credits

**Legal Assistant** 68 credits

**Associate in Science Degree**

*Location: Estherville Campus*

Legal assistants, also known as paralegals, provide invaluable assistance to attorneys. This program trains students to perform law-related duties under the direct supervision of a lawyer, such as doing legal research, drafting legal documents, conducting case investigations, helping to prepare cases for trial and assisting in the litigation process.

Program requirements:
General requirements for A. S. Degree: ............... 25 credits
Specialty requirements: ......................... 38-43 credits
LA113A  Business Law .......................................................... 3
LA114A  Introduction to Law and Paralegal ................................. 3
LA118A  Recreational Leadership ........................................... 4
RE113A  Concepts of Wellness .............................................. 3
RE114A  Foundations of Recreation ......................................... 3
RE118A  Recreational Leadership ........................................... 4
RE122A  Recreation Fieldwork I ............................................ 2
RE203A  Personal Health ....................................................... 3
RE212A  Recreation Fieldwork II ............................................ 2
PE213A  First Aid ................................................................. 3
RE214A  Program Planning and Organization ................................ 4

**Recreation Specialist** 68 credits

**Associate in Science Degree**

*Location: Estherville Campus*

This program is for individuals interested in outdoor recreation, community recreation, personal improvement, business, education and leisure, and is designed to prepare persons for leadership and supervision in this ever-growing field. It provides a central core of courses applicable to leisure time activity and also provides course work in specialized areas of recreation.

Program requirements:
General requirements for A. S. Degree: ............... 25 credits
Specialty requirements: ......................... 34-35 credits
RE113A  Concepts of Wellness .............................................. 3
RE114A  Foundations of Recreation ......................................... 4
RE118A  Recreational Leadership ........................................... 4
RE122A  Recreation Fieldwork I ............................................ 2
RE203A  Personal Health ....................................................... 3
RE212A  Recreation Fieldwork II ............................................ 2
PE213A  First Aid ................................................................. 3
RE214A  Program Planning and Organization ................................ 4
Technical Programs

Sales and Marketing Management

69 credits

Associate in Science Degree
Location: Emmetsburg Campus

This program builds on the background provided by the one-year diploma program in Sales and Marketing. The second year adds liberal arts courses and additional preparation for job opportunities or continuation at a four-year college.

Program requirements:
General requirements for A. S. Degree: 25 credits
Specialty requirements: 44-47 credits

BF100/101A DECA Activities* 0-1
BF102/120A DECA Activities* 0-1
BS104A Human Relations 3

BA103A Basic Accounting OR

BS103A Computer Applications in Business OR

BS106A Introduction to Computers/Information Systems 3

BS123A Marketing 3

BS225A Practicum 5

BS233A Advertising 3

BS104A Human Relations 3

BH124A Front Office Operations 4

FL118A Elementary Spanish 4

Travel and Tourism 68 credits

Associate in Science Degree
Location: Emmetsburg Campus

The travel and tourism industry is one of the fastest growing industries in the world. The goal of the program is to expose students to the many facets of this very diversified industry. Students participate in required field trips and two international study tours to gain first-hand knowledge of various career opportunities. The program may be started in any term and only one semester is required at the Emmetsburg campus.

Program requirements:
General requirements for A. S. Degree: 25 credits
Specialty requirements: 26-30 credits

TR113A Introduction to Tourism 3
TR116A Travel Geography 3
TR121A Directed Study Tour I 1
TR124A Reservations and Ticketing 4
TR126A Tour Management 3
TR133A Trends in Tourism 3

TR134A Tourism Marketing 3
TR211A Directed Study Tour II 1
TR216A Computerized Reservation Systems 4

(can count as general requirement)

TR225A Tourism Practicum 5

Electives to total 68 credits: 13-17 Credits

Recommended electives:
BS104A Human Relations 3
BH124A Front Office Operations 4

FL118A Elementary Spanish 4
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:
- Accounting Specialist
- Agribusiness Technology
- Associate Degree Nursing
- Automotive Technology
- Chiropractic Assistant
- Farm Management
- Hospitality Management
- Medical Assistant
- Medical Secretary

### Accounting Specialist

**Associate in Applied Science Degree**

*Location: Estherville Campus and Spencer Center*

This program prepares students for employment as accountants in private industry, public accounting firms and government or non-profit entities. With experience, graduates of this program advance to become accounting supervisors, staff accountants, cost accountants and partners or owners of a private practice. Graduates are knowledgeable in the preparation, examination and interpretation of financial data.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA113A Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BA116A Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA123A Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BA253A Income Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA125A Computer Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BA125C Accounting Projects II</td>
<td>2</td>
</tr>
<tr>
<td>BA213A Intermediate Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BA215C Accounting Projects III</td>
<td>2</td>
</tr>
<tr>
<td>BA223A Intermediate Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>BA243A Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BE111A Calculating Machines</td>
<td>2</td>
</tr>
<tr>
<td>BE243A Business Correspondence</td>
<td>2</td>
</tr>
<tr>
<td>BS106A Introduction to Computers/Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BS111A Business Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>BS113A Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BS121A Business Seminar II</td>
<td>1</td>
</tr>
<tr>
<td>BS123A Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>BS211A Business Seminar III</td>
<td>1</td>
</tr>
<tr>
<td>BS293A Management</td>
<td>3</td>
</tr>
<tr>
<td>BS294A Business Statistics</td>
<td>4</td>
</tr>
<tr>
<td>EN113A English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MA___A Mathematics</td>
<td>3-5</td>
</tr>
<tr>
<td>PY113A General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SC___A Science (see AA degree listing)</td>
<td>4</td>
</tr>
<tr>
<td>SP103A Speech Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>_____A Humanities (see AA degree listing)</td>
<td>3</td>
</tr>
</tbody>
</table>

Select from the following:
- BA235A Accounting Practicum ............. 5
- OR
- BA114C Accounting Projects I AND ....... 2
- EN123A English Composition II ......... 3
- TOTAL .................................. 76-78

### Agribusiness Technology

**Associate in Applied Science Degree**

*Location: Emmetsburg Campus*

This program emphasizes preparation for off-farm agricultural occupations. Training is conducted in all areas necessary for successful employment in elevators, feed mills, fertilizer plants and outlets, and other agriculture businesses in various capacities from route sales to assistant manager. Men and women who graduate from this program have been in great demand over the years. Supervised employment experience is available in any of over 250 cooperating agribusinesses in northern Iowa, southern Minnesota and eastern South Dakota.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB111A Introduction to Advertising Layout</td>
<td>1</td>
</tr>
<tr>
<td>AB112A Introduction to Computers</td>
<td>1</td>
</tr>
<tr>
<td>AB117A Beginning Sales</td>
<td>2</td>
</tr>
<tr>
<td>AB132C Office Procedures</td>
<td>2</td>
</tr>
<tr>
<td>AB133A Introduction to Commodity Marketing</td>
<td>3</td>
</tr>
<tr>
<td>AB137C Field Studies-Agribusiness Technology</td>
<td>1</td>
</tr>
<tr>
<td>AB139A Advertising</td>
<td>1</td>
</tr>
<tr>
<td>AB218C Beginning Accounting</td>
<td>2</td>
</tr>
<tr>
<td>AB225A Agriculture Business Law</td>
<td>2</td>
</tr>
<tr>
<td>AB227A Profitable Business Management</td>
<td>2</td>
</tr>
<tr>
<td>AB228C Seminar</td>
<td>2</td>
</tr>
<tr>
<td>AB229A Advanced Sales</td>
<td>2</td>
</tr>
<tr>
<td>AC112A Agronomy</td>
<td>2</td>
</tr>
<tr>
<td>AC113A Introduction to Soils</td>
<td>3</td>
</tr>
<tr>
<td>AC122A Agricultural Chemicals I</td>
<td>2</td>
</tr>
<tr>
<td>AC123A Agricultural Chemicals II</td>
<td>3</td>
</tr>
<tr>
<td>AC132A Introduction to Fertilizer Technology</td>
<td>2</td>
</tr>
<tr>
<td>AC136C Applied Agronomy</td>
<td>1</td>
</tr>
<tr>
<td>AC137A Plant Physiology</td>
<td>2</td>
</tr>
<tr>
<td>AC141A Crop Pest Identification</td>
<td>1</td>
</tr>
<tr>
<td>AC212A Advanced Agronomy</td>
<td>2</td>
</tr>
<tr>
<td>AC222A Advanced Soil Fertility</td>
<td>2</td>
</tr>
<tr>
<td>AD219A Advanced Marketing</td>
<td>2</td>
</tr>
<tr>
<td>AE112C Industrial Technical Welding</td>
<td>2</td>
</tr>
</tbody>
</table>
Associate Degree Nursing

Assoicated in Applied Science Degree

Location: Emmetsburg Campus

This program prepares men and women for entry-level positions in the field of nursing. Graduates of this program are eligible to write the Registered Nurse licensing examination (NCLEX-RN). This curriculum is fully accredited by the Iowa Board of Nursing and the Iowa Department of Education. The program is offered on a full-time basis. Admission to the program is for the first year (Practical Nursing) only. Admission to the second year of the program is through a separate application process requiring completion of the first year of a Practical Nursing curriculum.

A student who has not taken at least a semester course in chemistry in high school or a semester course in college (such as SC174A Introduction to Chemistry I, 4 cr.) is required to take SC171A Chemistry for Nursing, 1 cr., before entering the program and SC103A Beginning Chemistry, 3 cr., before beginning the second year.

To enter or progress in the program or to graduate, a student may have no grade lower than ‘C’ in any course required for the program, including prerequisites.

**Required Courses**

**Credits**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN113A</td>
<td>English Composition I</td>
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</tr>
<tr>
<td>HL112A</td>
<td>Human Growth and Development OR</td>
<td>3</td>
</tr>
<tr>
<td>PY223A</td>
<td>Developmental Psychology</td>
<td>3</td>
</tr>
<tr>
<td>HL118A</td>
<td>Normal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>NU112C</td>
<td>Maternal and Newborn Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NU129C</td>
<td>Adult and Child Health Nursing</td>
<td>9</td>
</tr>
<tr>
<td>NU152C</td>
<td>Foundations of Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NU158C</td>
<td>Foundations of Nursing Skills Lab</td>
<td>3</td>
</tr>
<tr>
<td>NU159C</td>
<td>Foundations of Nursing Clinical</td>
<td>2</td>
</tr>
</tbody>
</table>
Technical Programs

Automotive Technology

Associate in Applied Science Degree

Location: Emmetsburg Campus

Technological advances in the automotive industry require trained personnel to perform diagnosis and service. Opportunities for men and women who graduate from this program include dealership technicians, service managers, independent technicians, owner/managers, specialized or general technicians, vehicle/equipment sales and machine shop operators.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NU163C</td>
<td>Nursing Care through the Lifespan I</td>
<td>.3</td>
</tr>
<tr>
<td>NU213C</td>
<td>Adult Health Nursing II</td>
<td>.3</td>
</tr>
<tr>
<td>NU222C</td>
<td>Mental Health Nursing-Clinical</td>
<td>.2</td>
</tr>
<tr>
<td>NU227C</td>
<td>Nursing Interventions in Maternal and Child Health</td>
<td>.7</td>
</tr>
<tr>
<td>NU228C</td>
<td>Mental Health Nursing</td>
<td>.6</td>
</tr>
<tr>
<td>NU236C</td>
<td>Comprehensive Nursing</td>
<td>.2</td>
</tr>
<tr>
<td>NU253C</td>
<td>Nursing Care through the Lifespan II</td>
<td>.3</td>
</tr>
<tr>
<td>NU262C</td>
<td>Nursing Interventions in Maternal and Child Health-Clinical</td>
<td>.2</td>
</tr>
<tr>
<td>NU273C</td>
<td>Comprehensive Nursing-Clinical</td>
<td>.3</td>
</tr>
<tr>
<td>PY113A</td>
<td>General Psychology</td>
<td>.3</td>
</tr>
<tr>
<td>SC248A</td>
<td>Microbiology</td>
<td>.4</td>
</tr>
<tr>
<td>SC270A</td>
<td>Human Physiology</td>
<td>.4</td>
</tr>
<tr>
<td>SC271A</td>
<td>Human Anatomy and Lab</td>
<td>.4</td>
</tr>
</tbody>
</table>

TOTAL: .86

Chiropractic Assistant

Associate in Applied Science Degree

Location: Spencer Center

This program provides training for the student to become a professional assistant to a Doctor of Chiropractic. Students receive training in chiropractic administrative office procedures, limited radiology, and technical skills. Chiropractic assistants assist in the care and comfort of patients, general office duties and the technical operation of a chiropractic practice.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA103A</td>
<td>Basic Accounting</td>
<td>.3</td>
</tr>
<tr>
<td>BA125A</td>
<td>Computer Accounting</td>
<td>.2</td>
</tr>
<tr>
<td>BE101A</td>
<td>Keyboad or OR</td>
<td></td>
</tr>
<tr>
<td>BE113A</td>
<td>Keyboarding Applications</td>
<td>.2</td>
</tr>
<tr>
<td>BE128A</td>
<td>Introduction to Computers/Information Systems</td>
<td>.3</td>
</tr>
<tr>
<td>BS106A</td>
<td>Career Development</td>
<td>.1</td>
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<tr>
<td>CT143C</td>
<td>Chiropractic Assisting I</td>
<td>.3</td>
</tr>
<tr>
<td>CT153C</td>
<td>Chiropractic Assisting II</td>
<td>.3</td>
</tr>
<tr>
<td>CT163C</td>
<td>Chiropractic Lab Procedures</td>
<td>.2</td>
</tr>
<tr>
<td>CT176C</td>
<td>Chiropractic Practicum</td>
<td>.3</td>
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<tr>
<td>EN113A</td>
<td>English Composition</td>
<td>.3</td>
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<tr>
<td>MA103A</td>
<td>Math for General Education</td>
<td>.3</td>
</tr>
<tr>
<td>ME131C</td>
<td>Automated Medical Office</td>
<td>.2</td>
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<tr>
<td>ME140C</td>
<td>Applied Medical Psychology</td>
<td>.2</td>
</tr>
<tr>
<td>ME141C</td>
<td>Human Body in Health and Disease I</td>
<td>.4</td>
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<tr>
<td>ME143C</td>
<td>Human Body in Health and Disease II</td>
<td>.4</td>
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<tr>
<td>ME144C</td>
<td>Medical Office Management I</td>
<td>.3</td>
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<tr>
<td>ME145C</td>
<td>Medical Office Management II</td>
<td>.3</td>
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<tr>
<td>ME146C</td>
<td>Medical Transcription</td>
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<td>ME149C</td>
<td>Medical, Legal and Ethical Issues</td>
<td>.3</td>
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<tr>
<td>ME213C</td>
<td>Limited Radiology I</td>
<td>.3</td>
</tr>
<tr>
<td>ME224C</td>
<td>Limited Radiology II</td>
<td>.4</td>
</tr>
<tr>
<td>SP103A</td>
<td>Speech Fundamentals</td>
<td>.3</td>
</tr>
<tr>
<td>SS113A</td>
<td>Introduction to Sociology</td>
<td>.3</td>
</tr>
<tr>
<td>Humanities elective</td>
<td></td>
<td>.3</td>
</tr>
<tr>
<td>General elective</td>
<td></td>
<td>1-2</td>
</tr>
</tbody>
</table>

TOTAL: .85
### Farm Management

**Associate In Applied Science Degree**

**Location: Emmetsburg Campus**

This curriculum is divided into three phases: classroom activities; laboratory experience on the 400-acre college farm with livestock, crops, and equipment; and supervised employment experience during each planting and harvesting season. Work experience is either done on the student’s home farm or on a cooperating farm in the area. Graduates of this program either return to the home farm or work as farm or herd managers. Management decisions are made by students regarding crops, land, and livestock on the college farm. Computers are used extensively as management tools.

#### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB115A</td>
<td>Introduction to Cash Grain Marketing</td>
<td>2</td>
</tr>
<tr>
<td>AB116A</td>
<td>Introduction to Computers</td>
<td>2</td>
</tr>
<tr>
<td>AB134A</td>
<td>Advanced Computer Spreadsheets</td>
<td>2</td>
</tr>
<tr>
<td>AC121A</td>
<td>Introduction to Agronomy</td>
<td>2</td>
</tr>
<tr>
<td>AC122A</td>
<td>Agricultural Chemicals I</td>
<td>2</td>
</tr>
<tr>
<td>AC128A</td>
<td>Soil Fertility</td>
<td>3</td>
</tr>
<tr>
<td>AD216A</td>
<td>Agricultural Finance</td>
<td>3</td>
</tr>
<tr>
<td>AD230A</td>
<td>Principles of Farm Business Management</td>
<td>2</td>
</tr>
<tr>
<td>AE114C</td>
<td>Farm Equipment Maintenance</td>
<td>1</td>
</tr>
<tr>
<td>AE137C</td>
<td>Agricultural Welding</td>
<td>2</td>
</tr>
<tr>
<td>AE144C</td>
<td>Agricultural Construction</td>
<td>1</td>
</tr>
<tr>
<td>AG102A</td>
<td>Human Relations</td>
<td>2</td>
</tr>
<tr>
<td>AG103A</td>
<td>Employment Experience I - Farm Management</td>
<td>3</td>
</tr>
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</table>

#### Required Elective Courses (select from options and other courses listed here or other electives approved by the advisor)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AC112A</td>
<td>Agronomy</td>
<td>2</td>
</tr>
<tr>
<td>AC126A</td>
<td>Soil and Water Management</td>
<td>2</td>
</tr>
<tr>
<td>AC134A</td>
<td>Agricultural Botany</td>
<td>2</td>
</tr>
<tr>
<td>AC136A</td>
<td>Integrated Pest Management/Crop Management</td>
<td>2</td>
</tr>
<tr>
<td>AC216A</td>
<td>Nutrient Management</td>
<td>2</td>
</tr>
<tr>
<td>AC217A</td>
<td>Precision Agriculture</td>
<td>3</td>
</tr>
<tr>
<td>AD222A</td>
<td>Farm Machinery Management</td>
<td>2</td>
</tr>
<tr>
<td>AE212A</td>
<td>Grain Harvesting, Handling and Drying Equipment</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Crop Production

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS113A</td>
<td>Swine Production</td>
<td>3</td>
</tr>
<tr>
<td>AS115A</td>
<td>Swine Grower/Finisher Management</td>
<td>1</td>
</tr>
<tr>
<td>AS117A</td>
<td>Swine Breeding Herd Management</td>
<td>2</td>
</tr>
<tr>
<td>AS215A</td>
<td>Swine Confinement Management</td>
<td>2</td>
</tr>
<tr>
<td>AS221A</td>
<td>Advanced Swine Confinement Management</td>
<td>2</td>
</tr>
<tr>
<td>AS222A</td>
<td>Advanced Swine Production</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Swine Production

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS121A</td>
<td>Beef Cow Production</td>
<td>2</td>
</tr>
<tr>
<td>AS131A</td>
<td>Advanced Beef Cow Production</td>
<td>2</td>
</tr>
<tr>
<td>AS140A</td>
<td>Livestock Grazing Systems</td>
<td>1</td>
</tr>
<tr>
<td>AS213A</td>
<td>Beef Feedlot Production</td>
<td>2</td>
</tr>
<tr>
<td>AS217A</td>
<td>Animal Health and the Environment</td>
<td>2</td>
</tr>
<tr>
<td>AS224A</td>
<td>Advanced Beef Production</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Beef Production

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB133A</td>
<td>Introduction to Commodity Marketing</td>
<td>3</td>
</tr>
<tr>
<td>AD212A</td>
<td>Commodity Marketing II</td>
<td>2</td>
</tr>
<tr>
<td>AD226A</td>
<td>Commodity Marketing III</td>
<td>2</td>
</tr>
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</table>

#### Other Courses

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AG221C</td>
<td>Employment Seeking Skills</td>
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</tr>
<tr>
<td>AG222C</td>
<td>Oral Communications</td>
<td>2</td>
</tr>
<tr>
<td>AG223A</td>
<td>Employment Experience IV - Farm Management</td>
<td>3</td>
</tr>
<tr>
<td>AG241A</td>
<td>Computerized Agricultural Accounting</td>
<td>1</td>
</tr>
<tr>
<td>AS122A</td>
<td>Animal Science</td>
<td>2</td>
</tr>
<tr>
<td>AS127A</td>
<td>Animal Nutrition</td>
<td>2</td>
</tr>
<tr>
<td>BA103A</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

TOTAL: 49

TOTAL: 23
Four of the following must be completed prior to graduation:

AS120C  Artificial Insemination  ................. 1
AS251C  Farm Enterprise Experience/Beef Feedlot  .... 1
AS254C  Farm Enterprise Experience/Swine Production  .... 1
AS255C  Farm Enterprise Experience/Swine Management 1

AS258C  Farm Enterprise Experience/Cow-Calf ........... 1
AS259C  Farm Enterprise Experience/Forage Management 1
AB211C  Commodity Marketing Lab .................. 1
AC258C  Agronomy Lab .............................. 1
AD221A  Farm Machinery Management Lab ............ 1
TOTAL ............................................. 1
GRAND TOTAL .................................... .76 or more

BH217A  Applied Food Service Sanitation ............ .4
BH208A  Modified Diets .................................. 4
BH215A  Purchasing for the Hospitality Industry ....... 3
BH226C  Job Seeking Skills II ........................ 2
BH226A  Food and Beverage Management ............... 4
BH233A  Applied Food Service Sanitation ............... 4
BH333A  A Hospitality Law and Security ............... 3
BS104A  Human Relations .............................. 3
BS106A  Introduction to Computers/Information .... 3
BS263A  Legal Environment of Business ............... 3
BS233A  Marketing ................................... 3
BS293A  Management .................................. 3
SP103A  Speech Fundamentals ........................ 3
TOTAL ............................................. .78

Vocational Programs

Hotel and Restaurant Management

Associate in Applied Science Degree

Location: Emmetsburg Campus

This program prepares people for careers in the hospitality industry. Graduates qualify for positions that include country club managers, assistant managers, cooks, front office personnel, housekeeping managers, night auditors, banquet and hospitality managers, resort operators, and all levels of food service management in large and small restaurants, motels and cafeterias.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA103A  Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BE123C  Communications</td>
<td>3</td>
</tr>
<tr>
<td>BH105A  Food Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>BH107A  Nutrition for the Life Cycle</td>
<td>4</td>
</tr>
<tr>
<td>BH109A  Housekeeping Management</td>
<td>3</td>
</tr>
<tr>
<td>BH123A  Mathematics for Hospitality</td>
<td>3</td>
</tr>
<tr>
<td>BH124A  Front Office Operations/Night Audit</td>
<td>4</td>
</tr>
<tr>
<td>BH125A  Food Production</td>
<td>5</td>
</tr>
<tr>
<td>BH126C  Job Seeking Skills I</td>
<td>2</td>
</tr>
<tr>
<td>BH135A  On-the-Job Training</td>
<td>5</td>
</tr>
<tr>
<td>BH216A  Restaurant Management</td>
<td>4</td>
</tr>
</tbody>
</table>
# Medical Assistant

**Associate in Applied Science Degree**

**Location:** Spencer Center

The medical assistant program is accredited by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP) on the recommendation of the committee on accreditation for medical assistant education of the American Association of Medical Assistant Endowment. Graduates will be eligible to take the National American Association of Medical Assistant Certification Examination. Graduates of the Medical Assistant program are professional, multi-skilled persons dedicated to assisting with patient care in various health care facilities.

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA103A</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA123A</td>
<td>Computerized Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BE101A</td>
<td>Keyboarding OR</td>
<td></td>
</tr>
<tr>
<td>BE113A</td>
<td>Keyboarding Applications</td>
<td>2-3</td>
</tr>
<tr>
<td>BE102A</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BE128A</td>
<td>Career Development</td>
<td>1</td>
</tr>
<tr>
<td>BS106A</td>
<td>Introduction to Computers/Information Systems</td>
<td></td>
</tr>
<tr>
<td>EN113A</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MA103A</td>
<td>Mathematics for General Education</td>
<td>3</td>
</tr>
<tr>
<td>ME131C</td>
<td>Automated Medical Office</td>
<td>2</td>
</tr>
<tr>
<td>ME140C</td>
<td>Applied Medical Psychology</td>
<td>2</td>
</tr>
<tr>
<td>ME141C</td>
<td>Human Body in Health and Disease I</td>
<td>4</td>
</tr>
<tr>
<td>ME143C</td>
<td>Human Body in Health and Disease II</td>
<td>4</td>
</tr>
<tr>
<td>ME144C</td>
<td>Medical Office Management I</td>
<td>3</td>
</tr>
<tr>
<td>ME145C</td>
<td>Medical Office Management II</td>
<td>3</td>
</tr>
<tr>
<td>ME147C</td>
<td>Medical Transcription</td>
<td></td>
</tr>
<tr>
<td>ME149C</td>
<td>Medical Legal and Ethical Issues</td>
<td>3</td>
</tr>
<tr>
<td>ME150C</td>
<td>Medical Laboratory Procedures</td>
<td>4</td>
</tr>
<tr>
<td>ME156C</td>
<td>Pharmacology</td>
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<tr>
<td>ME162C</td>
<td>Clinical Assisting I</td>
<td>3</td>
</tr>
<tr>
<td>ME163C</td>
<td>Clinical Assisting II</td>
<td>3</td>
</tr>
<tr>
<td>ME176C</td>
<td>Medical Assistant Practicum</td>
<td>3</td>
</tr>
<tr>
<td>ME213C</td>
<td>Limited Radiology I</td>
<td>3</td>
</tr>
<tr>
<td>ME224C</td>
<td>Limited Radiology II</td>
<td>4</td>
</tr>
<tr>
<td>PY113A</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Credits Total

TOTAL: 76-77

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# Medical Secretarial Specialist

**Associate in Applied Science Degree**

**Location:** Spencer Center

This program trains students to handle the specialized duties within a modern medical office. The skills involve computers and technology as well as other aspects of the automated medical office. Medical secretaries work within clinics, surgeons' offices, hospital facilities and therapists' offices as well as administrative and other offices within medical centers such as medical records, transcription, admissions, insurance and reception areas.

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA103A</td>
<td>Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA116A</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA126A</td>
<td>Computerized Accounting and Payroll</td>
<td>3</td>
</tr>
<tr>
<td>BE113A</td>
<td>Keyboarding Applications</td>
<td>3</td>
</tr>
<tr>
<td>BE102A</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BE119A</td>
<td>Word Processing I</td>
<td>3</td>
</tr>
<tr>
<td>BE243A</td>
<td>Business Correspondence</td>
<td>2</td>
</tr>
<tr>
<td>BE253A</td>
<td>Spreadsheet Applications</td>
<td>3</td>
</tr>
<tr>
<td>BS104A</td>
<td>Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>BS106A</td>
<td>Introduction to Computers/Information Systems</td>
<td></td>
</tr>
<tr>
<td>EN113A</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MA103A</td>
<td>Math for General Education</td>
<td>3</td>
</tr>
<tr>
<td>ME131C</td>
<td>Automated Medical Office</td>
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</tr>
<tr>
<td>ME141C</td>
<td>Human Body in Health and Disease I</td>
<td>4</td>
</tr>
<tr>
<td>ME143C</td>
<td>Human Body in Health and Disease II</td>
<td>4</td>
</tr>
<tr>
<td>ME144C</td>
<td>Medical Office Management I</td>
<td>3</td>
</tr>
<tr>
<td>ME145C</td>
<td>Medical Office Management II</td>
<td>3</td>
</tr>
<tr>
<td>ME147C</td>
<td>Medical Transcription</td>
<td></td>
</tr>
<tr>
<td>ME149C</td>
<td>Medical Legal and Ethical Issues</td>
<td>3</td>
</tr>
<tr>
<td>ME173C</td>
<td>Medical Secretary Practicum</td>
<td>3</td>
</tr>
<tr>
<td>PY113A</td>
<td>General Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Credits Total

TOTAL: 76-77

---

# Vocational Programs

SP103A Speech Fundamentals ........................................3
SS113A Introduction to Sociology ..................................3
TOTAL .................................................................76-77

---
Vocational Programs

Diploma 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 Specialist
Auto Collision Repair Technology
Child Care
Construction Technology
Farm Equipment Technology
Graphic Technology
Marine and Small Engine Technology
Motorcycle Technology
Office Specialist
Parts Sales and Inventory Control
Practical Nursing
Residential Care Administration
Sales and Marketing
Secretarial Specialist
Surgical Technology
Welding

Accounting

Diploma

Location: Estherville Campus

In this program, students are provided entry-level skills necessary for success in an accounting-related field. Included are communication, basic accounting and computer skills as well as knowledge of income tax and payroll accounting. This is the first year of the Associate in Applied Science degree Accounting Specialist program.
### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA113A Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BA116A Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA123A Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BA126A Computer Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BE111A Calculating Machines</td>
<td>2</td>
</tr>
<tr>
<td>BE243A Business Correspondence</td>
<td>2</td>
</tr>
<tr>
<td>BS106A Introduction to Computers/Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>BS111A Business Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>BS121A Business Seminar II</td>
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</tr>
<tr>
<td>EN113A English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>BA253A Income Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MA___A Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>PY113A General Psychology</td>
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</tr>
<tr>
<td>SP113A Speech Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>35-37</td>
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</table>

### Construction Technology

#### Diploma

**Location: Emmetsburg Campus**

Training in all aspects of the building trades is a feature of this program. Drafting, wiring, welding, plumbing, masonry, concrete work, plastering, roofing, painting and decorating are studied in the classroom and practiced in the laboratory.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA111C Blueprint Reading and Sketching</td>
<td>2</td>
</tr>
<tr>
<td>CA112C Foundations and Concrete</td>
<td>7</td>
</tr>
<tr>
<td>CA114C Framing Techniques and Laboratory</td>
<td>8</td>
</tr>
<tr>
<td>CA125C Techniques of Exterior Covering</td>
<td>6</td>
</tr>
<tr>
<td>CA126C Construction Welding</td>
<td>1</td>
</tr>
<tr>
<td>CA128C Exterior Finishing Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>CA135C Construction Internship</td>
<td>6</td>
</tr>
<tr>
<td>CA211C Interior Wall Coverings</td>
<td>3</td>
</tr>
<tr>
<td>CA213C Methods of Interior Finishing</td>
<td>3</td>
</tr>
<tr>
<td>CM105C Communication Skills</td>
<td>2</td>
</tr>
<tr>
<td>TI102C Applied Mathematics</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>51</td>
</tr>
</tbody>
</table>

### Auto Collision Repair Technology

#### Diploma

**Location: Emmetsburg Campus**

In keeping with the advances in the industry, this program provides the men and women graduates with MIG welding in addition to flame oxygen welding; the latest techniques for repair of front wheel drive unibody construction vehicles; straightening of sheet metal; custom painting; tinting; and pin striping. Employment opportunities are numerous. The curriculum will change during the lifetime of this catalog.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BM111C Basic Repair</td>
<td>10</td>
</tr>
<tr>
<td>BM113C Basic Electrical Accessories</td>
<td>3</td>
</tr>
<tr>
<td>BM115C Refinishing</td>
<td>3</td>
</tr>
<tr>
<td>BM121C Major Collision Repair I</td>
<td>10</td>
</tr>
<tr>
<td>BM122C Estimating</td>
<td>5</td>
</tr>
<tr>
<td>BM123C Front End Alignment</td>
<td>2</td>
</tr>
<tr>
<td>BM131C Major Collision Repair II</td>
<td>5</td>
</tr>
<tr>
<td>BM132C Air Conditioning Service</td>
<td>3</td>
</tr>
<tr>
<td>CM105C Communication Skills</td>
<td>2</td>
</tr>
<tr>
<td>TI103C Welding</td>
<td>2</td>
</tr>
<tr>
<td>TI105C Human Relations</td>
<td>2</td>
</tr>
<tr>
<td>TI106C Human Relations</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>51</td>
</tr>
</tbody>
</table>
Today people at all levels of society are directing their attention to the needs of young children and their families. Ensuring that children are adequately cared for during work hours is a challenge facing the majority of American parents. The child care field allows dedicated people the opportunity to work with parents to educate and care for young children.

This program offers the student the opportunity to take a variety of coursework as well as be involved in a practicum experience in an early childhood setting. Students will be given a basic understanding of child development, child health, safety and nutrition and will learn a variety of skills including observing, recording and guiding behavior; first aid and CPR; and planning, preparing and presenting developmentally appropriate activities. Students will complete a professional resource file, a personal portfolio and a card file of appropriate children’s activities throughout the program.

The program may be completed in one or two years depending upon student ability and personal situation. To advance in the program or to graduate, a student may have no grade lower than ‘C’ in any child Care (CC prefix) course or in courses PE213A or ED203A. By completing the program, individuals can take advantage of career opportunities available or apply the coursework to the Early Childhood Education A.S. degree program. Graduates could be employed as an assistant working with infants, preschoolers and school-age children in a child care center, preschool, Head Start, family day care home, school, recreation center, residential home, or serve as a nanny, paraprofessional or classroom aide.

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS106A Introduction to Computers/Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CC102A Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CC110A Child Care Professionals I</td>
<td>1</td>
</tr>
</tbody>
</table>
Vocational Programs

CC111A Child Development Study Tour .................1
CC112A Child Health, Safety and Nutrition ............3
CC114A Principles of Child Care ....................3
CC120A Child Care Professionals II .................1

CC121A Practicum I ........................................2
CC123A Play and Creative Arts for Children ..........3
CC124A Inquiry Activities ............................3
CC125A Behavior and Guidance of Children .......3
ED203A Children’s Literature .........................3
PE213A First Aid ........................................3
SP103A Speech Fundamentals ..........................3
TOTAL .....................................................35

Farm Equipment Technology

Diploma
Location: Emmetsburg Campus

This program offers training in machinery set-up and repair, complete tractor repair, hydraulics, welding and diesel service. Two four-week portions of this program are spent working in a farm equipment dealership. Graduates are easily placed in the major farm equipment dealerships. A major change in program to offer an A.A.S. degree is in process.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM105C</td>
<td>Communication Skills</td>
<td>2</td>
</tr>
<tr>
<td>FM111C</td>
<td>Agricultural Equipment</td>
<td>4</td>
</tr>
<tr>
<td>FM113C</td>
<td>Electricity I</td>
<td>4</td>
</tr>
<tr>
<td>FM116C</td>
<td>Fundamentals of Engine Overhaul</td>
<td>6</td>
</tr>
<tr>
<td>FM121C</td>
<td>Air Conditioning</td>
<td>4</td>
</tr>
<tr>
<td>FM123C</td>
<td>Dealership Experience</td>
<td>2</td>
</tr>
<tr>
<td>FM126C</td>
<td>Differentials and Final Drives</td>
<td>6</td>
</tr>
<tr>
<td>FM127C</td>
<td>Transmissions</td>
<td>7</td>
</tr>
<tr>
<td>FM131C</td>
<td>Hydraulics</td>
<td>6</td>
</tr>
<tr>
<td>FM132C</td>
<td>Electricity II</td>
<td>4</td>
</tr>
<tr>
<td>FM211C</td>
<td>Engines II</td>
<td>5</td>
</tr>
<tr>
<td>FM212C</td>
<td>Diesel Fuel Systems</td>
<td>6</td>
</tr>
<tr>
<td>FM213C</td>
<td>Dealership Experience</td>
<td>2</td>
</tr>
<tr>
<td>FM221C</td>
<td>Fuel Systems Testing and Calibration</td>
<td>6</td>
</tr>
<tr>
<td>FM223C</td>
<td>Sales, Merchandising and Parts</td>
<td>2</td>
</tr>
<tr>
<td>TI103C</td>
<td>Welding</td>
<td>2</td>
</tr>
<tr>
<td>TI104C</td>
<td>Business Principles</td>
<td>2</td>
</tr>
<tr>
<td>TI105C</td>
<td>Human Relations</td>
<td>2</td>
</tr>
<tr>
<td>TI109C</td>
<td>Applied Mathematics</td>
<td>2</td>
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<tr>
<td>Elective</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>76</td>
</tr>
</tbody>
</table>
## Course Descriptions

### Graphic Technology

**Diploma**  
*Location: Estherville Campus*

This course of study prepares men and women for entry level positions in the printing trade with jobs such as typesetter, pressworker, paste-up person, binder, negative assembler, and platemaker. The outlook for employment is good with more and more small businesses using their own offset presses. The program includes practical experience in the college print shop. Students may opt to continue to the Graphic Design and Technology Associate in Science degree program.

**Required Courses**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR108A Electronic Publishing</td>
<td>3</td>
</tr>
<tr>
<td>AR133A Advertising Layout and Composition</td>
<td>3</td>
</tr>
<tr>
<td>AR163A Adobe® Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>AR173A Adobe® Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>AR234A Graphics Internship</td>
<td>4</td>
</tr>
<tr>
<td>BC101A Mass Media and Society</td>
<td>3</td>
</tr>
<tr>
<td>BG118C Printing Techniques I</td>
<td>4</td>
</tr>
<tr>
<td>BG128C Printing Techniques II</td>
<td>4</td>
</tr>
<tr>
<td>BS105A Web Page Design</td>
<td>3</td>
</tr>
<tr>
<td>EN113A English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>JR113A Photography</td>
<td>3</td>
</tr>
<tr>
<td>MA___A Mathematics elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>39</strong></td>
</tr>
</tbody>
</table>

### Marine and Small Engine Technology

**Diploma**  
*Location: Emmetsburg Campus*

This program prepares men and women for employment in recreation and those industries which rely on small engines to do their work. Employment opportunities include: motorcycle shops, marinas, implement dealerships, golf courses, hardware stores, lawn and garden shops, and any place which sells recreational or lawn and garden equipment. The curriculum will change during the lifetime of this catalog.

**Required Courses**  

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM105C Communication Skills</td>
<td>2</td>
</tr>
<tr>
<td>SM111C Engine Principles I</td>
<td>9</td>
</tr>
<tr>
<td>SM113C Electrical Systems I</td>
<td>5</td>
</tr>
<tr>
<td>SM115C Transmissions and Final Drives I</td>
<td>3</td>
</tr>
<tr>
<td>SM121C Engine Principles II</td>
<td>7</td>
</tr>
<tr>
<td>SM122C Electrical Systems II</td>
<td>5</td>
</tr>
<tr>
<td>SM123C Transmissions and Final Drives II</td>
<td>4</td>
</tr>
<tr>
<td>SM131C Engine Principles III</td>
<td>4</td>
</tr>
<tr>
<td>SM132C Electrical Systems III</td>
<td>3</td>
</tr>
<tr>
<td>SM133C Marine Lower Units</td>
<td>2</td>
</tr>
<tr>
<td>TI102C Applied Mathematics</td>
<td>2</td>
</tr>
<tr>
<td>TI103C Welding</td>
<td>2</td>
</tr>
<tr>
<td>TI105C Human Relations</td>
<td>2</td>
</tr>
<tr>
<td>TI107C Business Principles</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>52</strong></td>
</tr>
</tbody>
</table>
# Motorcycle Technology

**Diploma**  
**Location:** Emmetsburg Campus  
This is the only Motorcycle Technology program in the state of Iowa. It helps provide a supply of men and women to meet the critical need for competent technicians. Classroom and laboratory instruction is offered on the latest models of major brand motorcycles. The curriculum will change during the lifetime of this catalog.

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM105C</td>
<td>Communication Skills</td>
<td>.2</td>
</tr>
<tr>
<td>MM111C</td>
<td>Engine Principles</td>
<td>.6</td>
</tr>
<tr>
<td>MM112C</td>
<td>Electrical Systems</td>
<td>.4</td>
</tr>
<tr>
<td>MM113C</td>
<td>Fuel Systems</td>
<td>.4</td>
</tr>
<tr>
<td>MM114C</td>
<td>Ignition Systems</td>
<td>.2</td>
</tr>
<tr>
<td>MM121C</td>
<td>Chassis</td>
<td>.5</td>
</tr>
<tr>
<td>MM122C</td>
<td>Transmissions and Clutches</td>
<td>.6</td>
</tr>
<tr>
<td>MM123C</td>
<td>Tune-up and Testing</td>
<td>.4</td>
</tr>
<tr>
<td>TI101C</td>
<td>Orientation to College</td>
<td>.0</td>
</tr>
<tr>
<td>TI102C</td>
<td>Applied Mathematics</td>
<td>.2</td>
</tr>
<tr>
<td>TI103C</td>
<td>Welding</td>
<td>.2</td>
</tr>
<tr>
<td>TI105C</td>
<td>Human Relations</td>
<td>.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>.39</td>
</tr>
</tbody>
</table>

# Office Specialist

**Diploma**  
**Location:** Emmetsburg Campus  
The Office Specialist program is designed to develop the skills and attitudes of proficient office workers. Upon completion of the program a student is prepared for successful employment as a bookkeeper, receptionist, clerk-typist, records manager or general office worker. Both on-the-job training and employment placement are available in medical offices, banks, insurance and real estate offices, and on-campus at Iowa Lakes. This program can provide the first year of course work for the Associate in Science degree in the Administrative Assistant program.

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA103A</td>
<td>Basic Accounting*</td>
<td>.3</td>
</tr>
<tr>
<td>BA116A</td>
<td>Payroll Accounting</td>
<td>.3</td>
</tr>
<tr>
<td>BA125A</td>
<td>Computer Accounting</td>
<td>.2</td>
</tr>
<tr>
<td>BE103A</td>
<td>Business Professionalism I</td>
<td>.1</td>
</tr>
<tr>
<td>BE104A</td>
<td>Business Professionalism II</td>
<td>.1</td>
</tr>
<tr>
<td>BE111A</td>
<td>Calculating Machines*</td>
<td>.2</td>
</tr>
<tr>
<td>BE113A</td>
<td>Keyboarding Applications*</td>
<td>.3</td>
</tr>
<tr>
<td>BE115A</td>
<td>Office On-the-job Training †</td>
<td>.5</td>
</tr>
<tr>
<td>BE118A</td>
<td>Office Procedures</td>
<td>.3</td>
</tr>
<tr>
<td>BE119A</td>
<td>Word Processing*</td>
<td>.3</td>
</tr>
<tr>
<td>BE125A</td>
<td>Office On-the-job Training †</td>
<td>.5</td>
</tr>
<tr>
<td>BS102A</td>
<td>Human Relations</td>
<td>.2</td>
</tr>
<tr>
<td>BS105A</td>
<td>Web Page Design</td>
<td>.3</td>
</tr>
<tr>
<td>BS106A</td>
<td>Introduction to Computers/Information Systems</td>
<td>.3</td>
</tr>
<tr>
<td>EN113A</td>
<td>English Composition I*</td>
<td>.3</td>
</tr>
<tr>
<td>SP103A</td>
<td>Speech Fundamentals*</td>
<td>.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>40-45</td>
</tr>
</tbody>
</table>

† minimum of one Office On-the-job Training required.  
*These courses apply toward the A.S. degree in Administrative Assistant.
Parts Sales and Inventory Control

Diploma
Location: Emmetsburg Campus
This program trains persons for employment in automotive parts departments of automobile, truck and farm equipment dealerships, marine and small engine repair shops and auto supply stores. Computer training provides opportunities for employment in parts houses with sophisticated inventory access and control systems.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA103A</td>
<td>Basic Accounting</td>
</tr>
<tr>
<td>BF217A</td>
<td>Supervision</td>
</tr>
<tr>
<td>BF225A</td>
<td>Practicum</td>
</tr>
<tr>
<td>BS104A</td>
<td>Human Relations</td>
</tr>
<tr>
<td>BS106A</td>
<td>Introduction to Computers/Information Systems</td>
</tr>
<tr>
<td>BS143A</td>
<td>Sales Principles</td>
</tr>
<tr>
<td>BS243A</td>
<td>Advertising</td>
</tr>
<tr>
<td>CM105C</td>
<td>Communication Skills</td>
</tr>
<tr>
<td>PT113C</td>
<td>Parts Catalog</td>
</tr>
<tr>
<td>PT123C</td>
<td>Parts System</td>
</tr>
<tr>
<td>PT124C</td>
<td>Inventory Control</td>
</tr>
<tr>
<td>TI124C</td>
<td>Related Mathematics</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

Practical Nursing

Diploma
Location: Emmetsburg Campus
This program prepares men and women to write the examination for licensure as a practical nurse (NCLEX-PN). The courses taken during the first two semesters also serve as a portion of the Associate Degree in Nursing program. The program is fully accredited by the Iowa Board of Nursing and the Iowa Department of Education.

A student who has not taken at least a semester course in chemistry in high school or college (such as SC174A Introduction to Chemistry I, 4 cr.), is required to take SC171A Chemistry for Nursing, 1 cr., before entering the program.

To enter or progress in the program or to graduate, a student may have no grade lower than 'C' in in any course required for the program, including prerequisites.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN113A</td>
<td>English Composition</td>
</tr>
<tr>
<td>HL112A</td>
<td>Human Growth and Development</td>
</tr>
<tr>
<td>PY223A</td>
<td>Developmental Psychology</td>
</tr>
<tr>
<td>HL118A</td>
<td>Normal Nutrition</td>
</tr>
<tr>
<td>NU112C</td>
<td>Maternal and Newborn Nursing</td>
</tr>
<tr>
<td>NU129C</td>
<td>Adult and Child Health Nursing</td>
</tr>
<tr>
<td>NU132C</td>
<td>Dimensions of Practical Nursing</td>
</tr>
<tr>
<td>NU152C</td>
<td>Foundations of Nursing</td>
</tr>
<tr>
<td>NU158C</td>
<td>Foundations of Nursing Skills Lab</td>
</tr>
<tr>
<td>NU159C</td>
<td>Foundations of Nursing Clinical</td>
</tr>
<tr>
<td>NU163C</td>
<td>Nursing Care Through the Lifespan Clinical</td>
</tr>
<tr>
<td>NU173C</td>
<td>Dimensions of Practical Nursing-Clinical</td>
</tr>
<tr>
<td>SC271A</td>
<td>Human Anatomy and Lab</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

Residential Care Administration

Diploma
Location: Weekend College, Spencer Center
This curriculum has been approved by the Department of Health for certification in Residential Care Administration. Many of the courses also apply toward the Associate in Science degree in Health Care Administration.

Required Health-related courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>GR111A</td>
<td>Communication with the Elderly</td>
</tr>
<tr>
<td>GR123A</td>
<td>Gerontology</td>
</tr>
<tr>
<td>HC113A</td>
<td>Health Care Administration I</td>
</tr>
<tr>
<td>HC123A</td>
<td>Health Care Administration II</td>
</tr>
<tr>
<td>HC133A</td>
<td>Health Care Administration III</td>
</tr>
<tr>
<td>HC226A</td>
<td>Legislative/Political Aspects</td>
</tr>
<tr>
<td>HL223A</td>
<td>Human Relations</td>
</tr>
</tbody>
</table>

Required Arts and Science/Business Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA113A</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>BS293A</td>
<td>Management</td>
</tr>
<tr>
<td>EN113A</td>
<td>English Composition I</td>
</tr>
<tr>
<td>PY103A</td>
<td>Psychology of Adjustment</td>
</tr>
<tr>
<td>PY113A</td>
<td>General Psychology</td>
</tr>
<tr>
<td>PY243A</td>
<td>Abnormal Psychology</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>
Sales and Marketing

Diploma

Location: Emmetsburg Campus

The Sales and Marketing program provides preparation for entry level positions in the growing fashion trade and in sales and marketing. Graduates of this program find employment in merchandising, sales, buying, marketing, and advertising in specialty stores, boutiques, and department stores.

Graduates may also proceed to a second year and complete the requirements for the Associate in Science degree in Sales and Marketing Management.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA103A Basic Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BF101A DECA Activities</td>
<td>1</td>
</tr>
<tr>
<td>BF102A DECA Activities</td>
<td>1</td>
</tr>
<tr>
<td>BF111A Employment Strategy</td>
<td>2</td>
</tr>
<tr>
<td>BF114A Visual Merchandising</td>
<td>4</td>
</tr>
<tr>
<td>BF116A On-the-job Training</td>
<td>2</td>
</tr>
<tr>
<td>BF217A Supervision</td>
<td>4</td>
</tr>
<tr>
<td>BF225A Practicum</td>
<td>5</td>
</tr>
<tr>
<td>BS104A Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>BS143A Sales Principles</td>
<td>3</td>
</tr>
<tr>
<td>BS229A Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>BS233A Marketing</td>
<td>3</td>
</tr>
<tr>
<td>BS243A Advertising</td>
<td>3</td>
</tr>
<tr>
<td>EN113A English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>40</td>
</tr>
</tbody>
</table>

Secretarial Specialist

Diploma

Location: Emmetsburg Campus, Spencer Center

This program is designed to train students to handle duties in the modern secretarial office, including computer and word processing technologies. Students will qualify for positions such as word processing specialist, secretary, and legal or medical secretary.

Classes in this program can also apply toward the Associate in Science degree in Administrative Assistant or other related programs at Iowa Lakes.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA103A Basic Accounting*</td>
<td>3</td>
</tr>
<tr>
<td>BA116A Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BA125A Computer Accounting</td>
<td>2</td>
</tr>
<tr>
<td>BE103A Business Professionalism I</td>
<td>1</td>
</tr>
<tr>
<td>BE104A Business Professionalism II</td>
<td>1</td>
</tr>
<tr>
<td>BE111A Calculating Machines*</td>
<td>2</td>
</tr>
<tr>
<td>BE113A Keyboarding Applications</td>
<td>3</td>
</tr>
<tr>
<td>BE118A Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BE119A Word Processing*</td>
<td>3</td>
</tr>
<tr>
<td>BS102A Human Relations</td>
<td>2</td>
</tr>
<tr>
<td>BS105A Web Page Design</td>
<td>3</td>
</tr>
<tr>
<td>BS106A Introduction to Computers/Information Systems*</td>
<td>3</td>
</tr>
<tr>
<td>EN113A English Composition I*</td>
<td>3</td>
</tr>
<tr>
<td>SP103A Speech Fundamentals*</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>35</td>
</tr>
</tbody>
</table>

*These courses apply toward the A.S. degree in Administrative Assistant

Surgical Technology

Diploma

Location: Spencer Center

A trained surgical technologist is an integral member of the surgical team who works closely with registered nurses, anesthesiologists, surgeons and other personnel delivering care before, during and after surgery in hospitals and clinics.
## Welding

### Diploma

**Location: Emmetsburg Campus**

Welders today plan, supervise and perform tasks necessary for making, installing and repairing all types of equipment and structures. This program trains students to qualify in techniques, skills and use of welding equipment. Welding at Iowa Lakes is a self-paced program. As competency is reached in one area, the student moves to the next area.

### Required Courses

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM105C Communication Skills</td>
<td>2</td>
</tr>
<tr>
<td>TI102C Applied Mathematics</td>
<td>2</td>
</tr>
<tr>
<td>TI105C Human Relations</td>
<td>2</td>
</tr>
<tr>
<td>WE111C Oxy-acetylene Theory</td>
<td>4</td>
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<tr>
<td>WE112C Electric Arc</td>
<td>5</td>
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<tr>
<td>WE113C Blueprint Reading</td>
<td>3</td>
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<tr>
<td>WE114C Structural Welding</td>
<td>4</td>
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<tr>
<td>WE115C Brazing and Soldering</td>
<td>2</td>
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<td>WE121C MIG and TIG Theory</td>
<td>2</td>
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<td>WE122C MIG and TIG Laboratory</td>
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<td>WE123C Pipe Welding</td>
<td>5</td>
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<tr>
<td>WE124C Special Processing</td>
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<tr>
<td>WE125C Production Welding</td>
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<td><strong>TOTAL</strong></td>
<td><strong>40</strong></td>
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</tbody>
</table>

Curricular areas are the first two positions of the course number:

- Accounting BA
- Agribusiness AB
- Agriculture General AG
- Agriculture Economics AD
- Agriculture Engineering Technology AE
- Agriculture Transfer AT
- Agronomy AC
- Animal Science AS
- Art AR
- Auto Collision Technology BM
- Automotive Technology AM
- Aviation AV
- Broadcast Media BC
- Business Education BE
- Business General BS
- Child Care/Early Childhood Education CC
- Chiropractic CT
- Communications General CM
- Computer Aided Drafting and Design CD
- Computer Science CS
- Construction Technology/Carpentry/Building Trades CA
- Criminal Justice CJ
- Developmental Studies DV
- Education ED
- Engineering EG
- Environmental Science EV
- Farm Equipment Technology FM
- Fine Arts General FA
- Foreign Language FL
- Geographic Information Systems Technology GT
- Gerontology GR
- Graphic Design and Technology BG
- Health and Life Services General HL
- Health Care Administration HC
- Health Occupations HO
- Hotel and Restaurant Management BH
- Human Services/Disability Studies HD
- Industrial Technology TI
- Information Technology IT
- Journalism JR
- Legal Assistant LA
- Marine and Small Engine Technology MM
- Mathematics MA
- Medical Assistant ME
- Motorcycle Technology MM
- Music MU
- Nursing NU
- Parts Distribution and Inventory Control PT
- Philosophy and Religion PH
- Physical Education PE
- Psychology PY
- Recreation RE
- Sales and Marketing BF
- Science SC
- Social Science SS
Speech SP
Travel and Tourism TR
Welding WE

Course type is indicated by the last position of the course number:
A, B college transfer
C vocational-technical
H developmental
S special needs (no college credit)
P preparatory (secondary—no college credit)

Some courses with the number ending in ‘A’ which are offered in vocational-technical program areas may be considered to be vocational-technical at some colleges. IBM®, Lotus®, Lotus 1-2-3®, Aldus PageMaker®, Microsoft®, Windows®, and similar trademarks and trade names are the property of the owners of the products mentioned in course titles and descriptions.

**Accounting**

**BA101A Orientation to College, 0 cr.**
An introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q Grading.

**BA103A Basic 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 financial statements and keeping records for the receipt and disbursement of cash.

**BA113A Principles of Accounting I, 3 cr.**
Studies accounting methods, principles and terminology needed in the analysis and preparation of financial statements.

**BA114C Accounting Projects I, 2 cr.**
Provides experience in the application of accounting principles to a simulated retail business.

**BA116A Payroll Accounting, 3 cr.**
A study of payroll records and payroll taxes imposed by state and federal agencies.

**BA123A Principles of Accounting II, 3 cr.**
Continuation of BA113A, covering inventories, partnership and corporate accounting, long-term debts and financial analysis. Prerequisite: BA113A

**BA125A 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.

**BA125C Accounting Projects II, 2 cr.**
Provides experience in the setup and maintenance of a manual accounting system.

**BA126A Computerized 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.

**BA213A 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: BA123A.

**BA215C Accounting Projects III, 2 cr.**
Develops an understanding of international business operations and international accounting procedures utilizing a simulated retail business.

**BA223A Intermediate Accounting II, 4 cr.**
Continuation of BA213A, including in-depth analysis of generally accepted accounting principles pertaining to liabilities, equities, revenues and expenses. Prerequisite: BA213A.

**BA235A Accounting Practicum, 5 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.

**BA243A Cost Accounting, 3 cr.**
Develops an understanding of accounting methods for manufacturing and service enterprises including analysis techniques for management. Prerequisite: BA123A.

**BA253A Income Tax Accounting, 3 cr.**
Introduces the general theory and procedures pertaining to state and federal taxation. Studies applications of laws as they pertain to income of individuals and sole proprietorships, gifts, estates and Social Security.
Course Descriptions

Agribusiness

AB111A Introduction to Advertising Layout, 1 cr.
The opportunity for students to define, understand and actually make advertising layouts.

AB112A Introduction to Computers, 1 cr.
Introduction to computers and their applications to agriculture. The course includes computer literacy and operation, word processing and an introduction to spreadsheets.

AB115A Introduction to Cash Grain Marketing, 2 cr.
Introductory class covering the basic elements of grain marketing for producers, consisting of information relating to grain production and usage. The course will study fundamental market information; USDA feed grain programs; federal loan programs; grain reserve programs; elevator grain handling policies and storage programs; costs of storing grain; opportunity costs associated with grain storage; keeping farm stored grain in condition; evaluating LDP's and PCP's; and risk management in relationship to storing and pricing grain.

AB116A Introduction to Computers, 2 cr.
An introduction to the use of the IBM computer. The course covers MS-PC DOS commands most commonly used in agricultural, word processing and spreadsheet software.

AB117A Beginning Sales, 2 cr.
Studies the basic selling techniques with emphasis on retail selling, role playing in sales situations and video playback critique.

AB132C Office Procedures, 2 cr.
Course is designed to outline business procedures necessary to operate an agribusiness: sales receipts, bank drafts and other business forms.

AB133A Introduction to Commodity Marketing, 3 cr.
Introduction to the commodity futures markets, with information on contract specifications; types of exchanges; how the exchanges work; basic trading information; fundamental market information; and developing basis information. This is the first of a sequence of three courses for Farm Management students.

AB134A Advanced Computer Spread Sheets, 1 cr.
Spreadsheet applications for agriculture, using software such as Microsoft Excel. Included are lessons on spreadsheet operation (menu and icon), pre-developed spreadsheet operation and spreadsheet development.

AB137C Field Studies — Agribusiness Technology, 1 cr.
Course is designed to take the students on field trips to colleges, industries and agricultural businesses.

AB139A Advertising, 1 cr.
Introduction to advertising as well as an understanding of the use of the various media.

AB211C Commodity Marketing Laboratory, 1 cr.
Strategies to increase proficiency in commodity and option marketing. Includes knowledge needed to sit for the Series 3 National Futures Examination. Prerequisites: Commodity Marketing I and II and concurrent enrollment in Commodity Marketing III.

AB218C Beginning Accounting, 2 cr.
Covers the theory of double entry accounting, including the use of journals, ledgers, balance sheets and profit and loss statements.

AB225A Agriculture Business Law, 2 cr.
Introduction to business law which interprets the rights and social forces of business, society, government and contracts.

AB227A Profitable Business Management, 2 cr.
Studies the basic principles of business, including a brief overview of some economic principles and methods of doing business.

AB228C Seminar, 2 cr.
Studies current problems in agribusiness marketing.

AB229A Advanced Sales, 2 cr.
Continuation of AB117A, with emphasis on door-to-door selling as it relates to agriculture.

Agriculture Economics

AD212A Commodity Marketing II, 2 cr.
Course begins with agricultural options and ends with an introduction to technical signals. The second course in a sequence of three courses.

AD216A Agricultural Finance, 3 cr.
Studies the sources and uses of farm credit and coordinated financial statements to maximize farm income. Includes scoring of financial statements for analysis of financial positions for credit purposes.

AD219A Advanced Marketing, 2 cr.
Studies livestock and grain futures marketing methods including product quality, methods and options.

AD221A Farm Machinery Management Laboratory, 1 cr.
An individualized lab for students concurrently enrolled in AD222A. Students will analyze the machinery on their own farm operations for depreciation, economic values, cost per rotated acre and other economic analyses. Students may explore other software available for use on their farms.
Course Descriptions

AD222A  Farm Machinery Management, 2 cr.
Fitting power and machinery needs to specific farming operations to obtain efficiency.

AD226A  Commodity Marketing III, 2 cr.
This is the third in a sequence of three courses in commodity marketing. A significant part of this class involves student decision-making using information taught in previous courses in grain marketing, commodity marketing and agricultural finance.

AD230A  Principles of Farm Business Management, 2 cr.
Keeping and evaluating accurate records. Allocation of costs, production record periods, inventory specifications, partial budget development, enterprise budgets and cash flow budgets for financial planning are included.

Agricultural Engineering Technology

AE112C  Industrial Technical Welding, 2 cr.
Introduction to electric, gas, wire and oxy-acetylene welding.

AE114C  Farm Equipment Maintenance, 1 cr.
Basic machinery maintenance and adjustment of equipment used in agricultural business.

AE137C  Agricultural Welding, 2 cr.
Introduction to electric, gas, wire and oxy-acetylene welding.

AE144C  Agricultural Construction, 1 cr.
General farm construction including concrete work, fencing, building fabrication and remodeling, electrical wiring and plumbing for water and gas.

AE212A  Grain Harvesting, Handling and Drying Equipment, 2 cr.
The basic elements of grain handling taught in two segments. The first portion includes the types of combines on the market, their threshing characteristics, field operation, adjustments and safety. The second portion covers equipment involved in the handling, drying, aeration and management of stored grain. The student will locate, size and determine speeds of equipment to expedite the flow of material through grain systems.

Agriculture General

AG102C  Agricultural Mathematics, 2 cr.
Reviews the basic principles of elementary algebra and mathematics as they relate to basic agricultural problems.

AG103A  Employment Experience I — Farm Management, 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.

AG107C  Written Communication Skills, 2 cr.
Reading, writing and thinking exercises for vocational preparation.

AG108C  Communication Skills, 2 cr.
Same as AG 107C.

AG112A  Introduction to Human Relations, 2 cr.
Course designed to help students understand themselves and their potential customers, includes employer-employee relationships, human relations in agribusiness and fundamentals of advertising.

AG114A  Basic First Aid and Life Support, 1 cr.
Teaches American Red Cross basic first aid and American Heart Association cardiopulmonary resuscitation (CPR).

AG115A  Employment Experience I — Agribusiness, 3 cr.
A full time on-the-job, hands-on work experience in the area of agribusiness.

AG123A  Employment Experience II — Farm Management, 3 cr.
Continuation of AG103A.

AG125A  Employment Experience II — Agribusiness, 5 cr.
Continuation of AG115A.

AG131C  Agricultural Field Studies, 1 cr.
Studies the applications of husbandry practices in production agriculture as demonstrated by research farms, industry extension field days, and field trips to area farms.

AG150A  Independent Study — Agriculture, 1 cr.
Independent study or a special project in agriculture.

AG213A  Employment Experience III — Farm Management, 3 cr.
Continuation of AG123A.

AG215A  Employment Experience III — Agribusiness, 5 cr.
Continuation of AG 125A.
AG216C Oral Communication Skills, 2 cr.
Writing and speaking skills for agribusiness technology students.

AG221C Employment Seeking Skills, 1 cr.
Preparation of the farm management student for entry into the non-family farm job market.

AG222C Oral Communications, 2 cr.
Introduction to basic oral communication with practice in public speaking, both impromptu and prepared, interview procedures and telephone usage.

AG223A Employment Experience IV — Farm Management, 3 cr.
Continuation of AG213A.

AG226C Agricultural Sociology, 2 cr.
Course covers types of insurance, family and business budgeting, and farm organizations.

AG227A Employment Experience Observation — Agribusiness, 1 cr.
Student observes an agribusiness operation without pay.

AG228A Employment Experience IV — Agribusiness, 2 cr.
Continuation of AG215A.

AG229A Applied Computers in Agriculture, 2 cr.
Continuation of AB112A.

AG241A Computerized Agricultural Accounting, 1 cr.
Preparation for using an integrated computerized farm accounting system. This is a hands-on class for individuals who will be or are currently engaged in a farming operation.

AG251A Agriculture in the New Millennium I, 1 cr.
AG252A Agriculture in the New Millennium II, 1 cr.
A series of agriculture topics to include sales, equipment purchase, leasing, diesel servicing, vegetable production, flower production, tillage systems, tillage equipment, breeds of beef cattle, cuts of beef, purchasing quality beef. Seminars are offered at the Clay County Fair; a student must complete four, four-hour blocks to earn each credit.

Agriculture Transfer

AT113A Animal Science, 3 cr.
An introduction to animal science through the topics of animals in society, biological principles, stewardship, and animal industries as they relate to animal production the U.S. and the world.

AT124A Crop Production, 3 cr.
Introduction to the study of plants, soils and climatic interrelationships in the production of food and fiber.

AT214A Introduction to Soils, 3 cr.
An introduction to basic soil formation, classification, physical properties, water, organic matter, pH and fertility. The dynamic ecological system that provides a media for plant growth will be explored during the class. Prerequisite: SC174A.

AT218A 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: AT113A, SC174A.

Agronomy

AC112A Applied Agronomy, 2 cr.
Introduction to the study of plants, soils and climatic relations. Plant anatomy, classification and identification are emphasized.

AC113A Introduction to Soils, 3 cr.
An introductory study of soil formation, physical properties of soils and soil water. Soils will be evaluated for their suitability for crop production.

AC121A Introduction to Agronomy, 2 cr.
Soil preparation, planting dates, planting depths, seeding rates and plant distribution of corn and soybeans. Different types of planting equipment are compared. Students will adjust, calibrate and operate a planter in the field for a half day.

AC122A Agricultural Chemicals I, 2 cr.
Preparation for the student to pass the state of Iowa Custom Applicators Core Manual examination. Includes safe use and handling of pesticides.

AC123A Agricultural Chemicals II, 3 cr.
A study of weed and insect pests. Prepares students to pass the Weed Management, Category 1-A and the Insect Management, Category 1-B, portions of the Iowa Custom Applicators examination.

AC126A Soil and Water Management, 2 cr.
Preparation for the Certified Crop Examiner exam, covering the soil and water section of the state and national examination. Prerequisites: AC128A, AC133A, AC134A.

AC128A Soil Fertility, 3 cr.
Basic review of soil formation, soil components including soil types, soil compaction and tillage systems as they relate to fertilizer placement. Includes a study of fertilizer materials, fertilizer costs, soil sampling, soil test interpretation, fertilizer recommendations based on soil test results, soil amendments, nutrient removal and fertilizer application methods. Also included is the effect that CEC, pH and organic matter have on nutrient retention and uptake. Environmental concerns are also addressed.
AC132A Introduction to Fertilizer Technology, 2 cr.
Studies soil fertilization, with emphasis on plant nutrition, soil testing, fertilizer recommendations and fertilizer materials. Students also study elements of precision farming including GPS, GIS and VRT.

AC134A Agricultural Botany, 2 cr.
A beginning course on plant structure, reproduction and identification of plants important to midwestern agriculture.

AC136A Integrated Pest Management, 2 cr.
This course prepares students for the Certified Crop Advisor exam, covering only the integrated pest management section of the state and national examination. Prerequisites: AC128A, AC133A, AC134A.

AC136C Applied Agronomy, 1 cr.
Practical experience with all facets of corn and soybean production. Students are required to plan and care for a demonstration plot. The course includes, but is not limited to, seed, herbicide and fertilizer selection and application.

AC137A 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.

AC141A Crop Pest Identification, 1 cr.
Students will collect and learn to identify weed and insect pests of corn and soybeans.

AC212A Advanced Agronomy, 2 cr.
Soil fertility, soil and water management, pest management and crop production objectives of this course have been selected to match those of the Certified Crop Advisor test of the American Society of Agronomy.

AC216A Nutrient Management, 2 cr.
This course prepares students for the Certified Crop Advisor exam, covering only the nutrient management section of the national examination. Prerequisites: AC128A, AC133A and AC134A.

AC217A Precision Agriculture, 3 cr.
An introduction to the use GPA and VRT as it impacts agricultural producers. Students will use field mapping software and GPS systems as part of the class.

AC222A Advanced Soil Fertility, 2 cr.
Course teaches an understanding of the soil environment and its relationship to crop production, including soil organisms, organic matter, cation exchange and soil pH.

AC258C Agronomy Laboratory, 1 cr.
An individualized course for students wishing to develop a more in-depth or specialized study of agronomic information in conjunction with members of the teaching staff.

Animal Science

AS113A Swine Production, 3 cr.
A beginning study of swine production. The general scope of commodity pork production is presented. Basic skills and technologies needed for selection of breeding stock; herd health preventive measures; artificial insemination; care and management of the sow and litter from breeding through weaning. Lecture and laboratory.

AS115A Swine Grower/Finisher Management, 1 cr.
Basic swine production to include nutrition, feed and feed handling and analysis.

AS117A Swine Breeding Herd Management, 2 cr.
In-depth evaluation of theories and applications involved in breeding herd management. Breeding herd housing, boar growth and development, physiology, nutrition, herd health and swine herd record basics are included.

AS120C Artificial Insemination, 1 cr.
A short course in beef animal reproduction, including anatomy and actual practice on live animals. A completion certificate is earned. (Formerly was AI120C.)

AS121A Beef Cow Production, 2 cr.
Includes management, nutrition and breeding practices in a beef cow operation through classroom and practical experience.

AS122A Animal Science, 2 cr.
Introduction to the basics of livestock and poultry production.

AS127A Animal Nutrition, 2 cr.
Teaches basic nutrition and ration balancing for animals.

AS131A 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.

AS140A Livestock Grazing Systems, 1 cr.
Classroom and farm lab instruction covering establishment, management, economics and nutritional value of grazing systems.

AS213A Beef Feedlot Production, 2 cr.
Various aspects of the cattle feeding industry with emphasis in the feeder cattle segment including cattle trends, facilities, nutrition and management.

AS214A Animal Science, 2 cr.
Course offers beef, swine, dairy and sheep management.

AS215A Swine Confineement Management, 2 cr.
Swine breeding herd production in the environmentally controlled housing system. Evaluation of swine records for
indentification of problems which can be solved is present-
ed by case studies. Development of decision trees for pos-
sible solutions and utilization of computer-based decision
and evaluation tools provide decision-making applications
for cases studied.

AS217A  Animal Health and the Environment, 2 cr.
Animal environment and adaptation, animal health and ani-
mal behavior as it relates to production and non-production
species.

AS221A  Advanced Swine Confinement
Management, 2 cr.
Swine confinement systems and management principles
including planning and evaluation of equipment; ventilation
systems; waste management; uniform swine record sys-
tems; and herd health status. Enterprise analysis and benchmark-
king are included to enhance development of the swine
manager’s business skills.

AS222A  Advanced Swine Production, 3 cr.
Feeding equipment, nutrition, diseases, marketing and eco-
nomic principles for day-to-day decisions in swine produc-
tion. Units include housing and environment. Prerequisite:
AS113C.

AS224A  Advanced Beef Production, 2 cr.
Study of all phases of the beef enterprise as they relate to the
management areas of marketing, production goals, record
systems, record analysis and animal health.

AS251C  Farm Enterprise Experience/Beef Feedlot, 1 cr.
AS254C  Farm Enterprise Experience/Swine, 1 cr.
AS255C  Farm Enterprise Experience/Swine
Management, 1 cr.
AS258C  Farm Enterprise Experience/Cow-Calf, 1 cr.
AS259C  Farm Enterprise Experience/Forage
Management & Utilization lab, 1 cr.
Hands-on experience at the college farm lab in the listed
areas.

Art

AR101A  Orientation to College, 0 cr.
An introduction to academic and personal information relat-
ed to Iowa Lakes Community College. This information is
vital for student success. P/Q grading.

AR103A  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.

AR105A  Art History, 3 cr.
In-depth study of how art relates to a time line, studying art
in chronological order from ancient Greece to the present.
Explores the connection between great works and the envi-
ronments that stimulated their creation.

AR108A  Electronic Publishing, 3 cr.
Basic through intermediate understanding of the electronic
page layout software programs of QuarkXPress® and
Adobe® PageMaker. In addition, students will work with
imported graphics, typography and electronic color systems.

AR117A  Digital Illustration, 3 cr.
The focus of this course is in acquiring digital images through
the use of flatbed and slide scanners, digital and video cam-
eras, electronic stock photography and clip art. Images are
then prepared for optimum output.

AR119A  Drawing I, 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.

AR121A  Art Interim, 1 cr.
Supplemental enrichment course relating to art which
includes special projects. P/Q grading.

AR128A  Advertising Studio, 3 cr.
This is the final design course in the graphic design program.
Students work with advanced design problems and con-
cepts. Emphasis is placed on the design and preparation of
a resume and portfolio.

AR129A  Drawing II, 3 cr.
Continuation and elaboration of Drawing I. Prerequisite:
AR119A.

AR133A  Advertising Layout and Composition, 3 cr.
Introductory course providing students with a comprehen-
sive foundation in creative communications as it applies to
advertising in all forms, from print to broadcast to interactive
media. Subjects covered include creative philosophies, mar-
ket research, copy editing, selecting illustrations, layout and
organization of ads.

AR143A  Painting I, 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.

AR150A  Independent Study in Art, 1 cr.
Independent study or a special project in art.

AR153A  Painting II, 3 cr.
Continuation of Painting I with emphasis on a more person-
al approach regarding technique and imagery. Prerequisite: AR143A.

AR163A Adobe® Photoshop, 3 cr.
Introductory course to Adobe® Photoshop, a raster-based computer painting and image editing software program.

AR171A Independent Study—Art, 1 cr.
Instructor guided independent experiences in art.

AR173A Adobe® Illustrator, 3 cr.
Introductory course to Adobe® Illustrator, a vector-based computer drawing software program.

AR219A Ceramics I, 3 cr.
A studio class providing exploratory experiences in the forming, firing, and decorating of clay.

AR229A Ceramics II, 3 cr.
Continuation of Ceramics I with an emphasis on the development of a personal approach to form. Prerequisite: AR219A.

AR233A Design I, 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.

AR234A Graphics Internship, 5 cr.
Supervised, paid work experience in a business or industry involved with an area of graphic design and/or printing.

Auto Collision Repair Technology

BM111C Basic Repair, 10 cr.
Introduction to the forming of sheet metal. Straightening, shrinking, replacement and alignment of body parts is included. Lecture and laboratory.

BM113C Basic Electrical Accessories, 3 cr.
Introduction to electrical automotive accessories. Lecture and laboratory.

BM115C Refinishing, 3 cr.
Introduces the proper use of primers, sealers, lacquers, acrylics and enamels and their uses on spot and overall refinishing. Lecture and laboratory.

BM121C Major Collision Repair I, 10 cr.
Concepts of automotive frame and unibody design, with instruction in measuring, aligning and repairing collision damage. Lecture and laboratory.

BM122C Estimating, 5 cr.
Teaches proper procedures in preparing estimates for body and paint work using estimating guides. Writing estimates of damage, figuring flat rate labor charges and cost of materials are included.

BM123C Front End Alignment, 2 cr.
Studies malfunctions in steering gear, front suspension, caster, camber and proper procedures for corrections. Lecture and laboratory.

BM131C Major Collision Repair II, 5 cr.
Training in restoring damaged vehicles to their original condition. Lecture and laboratory.

BM132C Air Conditioning Service, 3 cr.
Introduction to air conditioning servicing and replacement of components. Lecture and laboratory.

Automotive Technology

AM113C Shop Safety, 2 cr.
Prepares the student to work in the auto shop in a safe manner. The student will be introduced to safety equipment, safety rules and avoidance of common accidents in the automotive service area.

AM114C Shop Practices, 4 cr.
Basic theory and correct procedures for servicing vehicles provide the student with the skills and knowledge required for routine vehicle maintenance.

AM115C Heating and 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.

AM117C Electrical Systems Theory, 4 cr.
Electrical theory, diagnosis and repair procedures as they pertain to the automotive charging, starting and power accessory systems.

AM120C Electrical Systems Laboratory, 3 cr.
Hands-on class in the operation, construction and repair of alternators, starters and electrical components as they apply to safety and driver convenience.

AM124C Fuel Systems, 4 cr.
Diagnostic and repair procedures used to service the automotive fuel system from the fuel tank to the fuel injector.

AM125C Ignition Systems, 4 cr.
Operation, diagnosis and repair procedures used to service the modern automotive ignition system.

AM126C Computerized Engine Controls, 4 cr.
Theory of operation, diagnosis and repair procedures for electronic engine control systems used by the automotive industry.

AM127C Performance Diagnosis, 4 cr.
Diagnosis, repair and adjustment of electronic engine controls, including ignition, emission and fuel systems.
AM134C Automotive Brakes 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.

AM135C Automotive Brakes Laboratory, 4 cr.
A lab experience which will allow the student to acquire competencies in brake diagnosis and repair procedures.

AM213C Manual Transmissions Theory, 4 cr.
Comprehensive study of the drive train components and their relationship to the application of power in the modern automobile.

AM217C Manual Transmissions Laboratory, 3 cr.
Hands-on class shows operation and proper repair procedures of current manual transmissions/transaxles, differentials and drive axles used in late model vehicles.

AM215C Automatic Transmission Theory, 4 cr.
Principles of operation of torque converters, planetary gears, multiple disc clutches, one-way clutches, servos, accumulators and hydraulics.

AM216C Automatic Transmission Laboratory, 4 cr.
Various transmissions and transaxles are overhauled, adjusted and tested; basic overhaul techniques, special tool and gauge usage are included.

AM220C Suspension Theory, 3 cr.
Theory of automotive and light truck steering and suspension systems; covers design, operation, diagnosis, repair and adjustment.

AM222C Suspension Laboratory, 3 cr.
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.

AM225C Automobile Engine Laboratory, 5 cr.
Disassembly and assembly procedures. Diagnosis of engine malfunctions, minor repair and complete overhaul, excluding rebuilding procedures such as boring cylinders and grinding crankshafts.

AM226C Automobile Engine Theory, 4 cr.
Basic engine theory; parts identification, wear measurements, wear locations, valve refacing, valve guide service, valve seat reconditioning and engine diagnosis using various tests. Includes the reconditioning of cylinders, crankshaft and camshaft.

Aviation

AV101A Private Pilot Flight Laboratory I, 3 cr.
Primary flight instruction in the basics of flying, leading 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.

AV102A 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.

AV103A Commercial/Instrument Cross Country Flight Laboratory, 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: AV101A or hold a Private Pilot Certificate.

AV105A 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.

AV150A Independent Study in Aviation, 1 cr.
Independent study or a special project in aviation.

AV201A Commercial/Instrument Flight Laboratory, 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: AV103A.

AV202A Instrument Ground School, 3 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. Prerequisite: AV104A.

AV203A Flight Instructor Flight Laboratory, 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.

AV204A Flight Instructor 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).

AV205A Instrument Flight Instructor Lab, 1 cr.
Prepares students to be instrument flight instructors. The student will take the FAA flight test for this certificate at com-
Audio production in both radio and television with the main
class will focus on the news package and news stories.

AV206A Multi-Engine Rating, 3 cr.
Ground and flight instruction to prepare the student for transi-
tion to multi-engine aircraft. The student will take the FAA
flight test at completion of the course. Prerequisite: 

AV207A Aviation Practicum, 1 cr.
Student is placed at an employment site, usually as a flight
instructor, line personnel, co-pilot, etc. The employer evalu-
ates student performance. Repeatable to a maximum of
three total credits. Prerequisite: Instrument Commercial
Pilot Certificate.

AV208A Employment Preparation for Aviation
Careers, 1 cr.
Teaches students how to prepare an aviation-type resume,
cover letter, and how to handle an aviation job interview.

AV209A Great Lakes Airline Internship, 3 cr.
Internship in aviation at Great Lakes Airlines.

Broadcast Media

BC101A Mass Media and Society, 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.

BC112A Public Relations, 3 cr.
The practice of public relations and those elements affecting
or affected by public relations: history, publics, public opin-
ion theories, ethics, types of media, writing skills, presenta-
tion skills, crisis situations, cultural differences or beliefs, law
careers in public relations and the future of public relations.

BC150A Independent Study in Broadcasting, 1 cr.
Independent study or a special project in broadcasting.

BC200A Sophomore Portfolio, 0 cr.
The portfolio consists of a resumé, resumé videotape and/or
audio demo tape prepared for job applications.

BC202A Writing for the Media, 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 supplement the stories with
video. Students will be introduced to the broadcast style
and philosophy of writing. Work includes decisions on story
selection and interviewing skills on a variety of topics. The
class will focus on the news package and news stories.

BC203A Audio Production, 3 cr.
Audio production in both radio and television with the main
focus on 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 con-
rol-board skills, production skills, discipline and structure.

BC212A Broadcast Media Practicum, 2 cr.
Students complete an internship before graduation from the
broadcast media program. Internships are arranged through
the program coordinator with radio and television stations
throughout the midwest and the nation. May not also take
BC232A.

BC221A Television Studio Production I, 3 cr.
Introduction to the basic operation of a television studio.
Students will become familiar with the operation of equip-
ment and personnel in the studio (cameras, floor directing,
on-camera talent) and control room (directing, character
generator, audio, video). Emphasis will be on the practi-
cal/hands-on experience elements of studio production.

BC223A Advanced Video Editing, 3 cr.
This course is designed to take students past the single-
source, cuts-only editing systems into advanced editing tech-
niques. Students will utilize A/B roll, multiple source sys-
temns in addition to computer-based editing systems (non-
linear). Prerequisite: BC221A.

BC232A Broadcast Media Practicum, 5 cr.
Same as BC212A, for additional hours of experience. May
not also take BC212A.

BC234A Radio Workshop, 4 cr.
Students will perform radio station operations and practices
in the college cable broadcast radio station. The majority of
the programming and performance of the station will be the
responsibility of students in this course. Prerequisite: 
BC203A.

BC241A Television Studio Production II, 3 cr.
This course focuses on production of pre-scripted programs
for the public access station on the local cable system.
Students will perform as crew members in various studio
productions. Prerequisite: BC221A.

BC243A Electronic Field Production I, 3 cr.
Students will concentrate on the equipment used in field/
remote video productions and will participate in several
single camera field productions. Students will shoot,
direct and post-produce field productions. Prerequisite: 
BC221A.

BC253A Electronic Field Production II, 3 cr.
Students will learn and participate in advanced single-cam-
era productions. Focus is on producing field programs out-
side the studio environment for the public access channel on
the local cable system. Programs will include college and
communities, such as college trustee and city council meetings. Prerequisite: BC243A.

**Business Education**

**BE101A** Keyboarding, 2 cr.
Teaches the basic computer keyboard using the touch method to develop speed and accuracy.

**BE102A** Medical Terminology, 3 cr.
Studies medical terminology, including spelling and definitions.

**BE103A** Business Professionalism I, 1 cr.
Introduction to Business Professionals of America activities, which includes preparation for state and national competitive events, leadership and professional development.

**BE104A** Business Professionalism II, 1 cr.
Continuation of BE103A.

**BE105A** Business Communications, 2 cr.
Emphasizes the communication skills necessary for employment. Proper use of grammar, sentence structure and punctuation will be covered. Written business communications, including letters, memoranda and business reports; job application procedures, including interviews, data sheets and letters; listening skills and telephone skills will be covered. Proper English, good form and completeness of message will be emphasized.

**BE108A** Business Professionalism I, 0 cr.
Same as BE103A.

**BD109A** Business Professionalism II, 0 cr.
Same as BE104A.

**BE110A** Word Processing/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.

**BE111A** Calculating Machines, 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.

**BE112A** Medical Office Procedures, 2 cr.
Gives a background in basic medical terminology and medical office situations.

**BE113A** Keyboarding Applications, 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.

**BE115A** Office On-the-job Training I, 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.

**BE118A** 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.

**BE119A** Word Processing, 3 cr.
The essentials of word processing and the use of text-editing equipment.

**BE121A** Word Processing, 2 cr.
Instruction in word processing software and machine transcription.

**BE122A** Medical Office Transcription, 2 cr.
Emphasis on medical terminology and transcription. Prerequisite: BE113A.

**BE123A** Advanced Keyboard Applications, 3 cr.
An advanced course in keyboarding that concentrates on production skills. It includes business forms, form letters and higher levels of executive keyboarding, including setting up and entering problems with no instruction and recognizing and correcting errors in content and arrangement. Prerequisite: BE113A or instructor approval.

**BE123C** Communications, 3 cr.
Communication skills necessary in the business world, including use of the telephone, interviews, job applications, listening skills and letter writing.

**BE124A** Speed Writing/Shorthand, 4 cr.
Building skills in dictation and transcription problems. Prerequisite: grade of 'C' or better in BE114A or similar background in shorthand.

**BE125A** Office On-the-job Training II, 5 cr.
Apprenticeship in office systems. Students will work as regular employees in offices supervised by staff members.

**BE128A** Career Development, 1 cr.
Teaches necessary attitudes and behaviors needed in the business world.

**BE131A** Current Topics-Office, 1 cr.
A specialized study of a current topic in office procedures.

**BE132A** Legal Office Procedures, 2 cr.
Provides a background in basic legal terminology and legal office situations.
BE142A Legal Office Transcription, 2 cr.
Emphasizes legal terminology and transcription. Prerequisite: BE113A.

BE143A Spreadsheet/Database Management, 3 cr.
This course provides the student with hands-on training with spreadsheet and database management software programs. Course work includes sorting, setting up reports and spreadsheet analysis.

BE151A Introduction to Word, 1 cr. ONLINE COURSE
Learn how to create and modify documents in Word, Microsoft®’s premier word processing program. P/q grading.

BE152A Intermediate Microsoft® Word, 1 cr. ONLINE COURSE
Learn how to set up columns and tables within a document, insert, reposition, edit and resize graphic images, draw lines, surround text or graphics with borders, achieve effects by varying the size, appearance and orientation of text, and more. P/q grading.

BE153A Advanced Microsoft® Word, 1 cr. ONLINE COURSE
Learn how to build time saving macros, customize toolbars, create shortcut keys, crank out form letters and mailing labels, perform queries, and more. P/q grading.

BE154A Introduction to Microsoft® Excel, 1 cr. ONLINE COURSE
Discover shortcuts and tricks for formatting worksheets. Learn to write formulas, using the function wizard, sorting and analyzing data, creating custom charts, creating 3-dimensional workbooks, building links, and creating macros and custom toolbar buttons. P/q grading.

BE155A Intermediate Microsoft® Excel, 1 cr. ONLINE COURSE
Learn features such as the pivot table, AutoFilter, decision-making features, complex math features, and advanced graphing features. P/q grading.

BE156A Introduction to Microsoft® Access, 1 cr. ONLINE COURSE
Learn how to use this database program to store, locate, print and automate access to just about any type of important information. P/q grading.

BE157A Intermediate Microsoft® Access, 1 cr. ONLINE COURSE
Learn how to build a fully automated database management system complete with the student’s own custom data entry forms, graphics, and more. P/q grading.

BE158A Introduction to Microsoft® PowerPoint, 1 cr. ONLINE COURSE
Learn how to use PowerPoint to create slide presentations with multimedia slides, charts, outlines, graphs, clip art, hypertext links, and special effects. P/q grading.

BE159A Introduction to PC Troubleshooting, 1 cr. ONLINE COURSE
Learn how to put an end to those nagging system glitches, interpret error codes and messages, detect and eliminate conflicts, replace drivers, and perform basic preventative maintenance. P/q grading.

BE161A Introduction to Quickbooks, 1 cr. ONLINE COURSE
Learn how to set up a chart of accounts, reconcile a checking account, create and print invoices, receipts, and statements, track payables, inventory, and receivables, create estimates and generate reports. P/q grading.

BE162A Quicken for Windows, 1 cr. ONLINE COURSE
Manage home and small business finances with Quicken. Learn how to deal with investments, loans, recurring payments, electronic transactions, budgets and more. P/q grading.

BE163A Window File & Disk Management, 1 cr. ONLINE COURSE
Learn how to find missing files, delete, copy and move files, work with the recycle bin, organize, maintain and troubleshoot a hard disk, add and remove items from the start button, work with the Startup group, create desktop icons and other shortcuts to the student’s favorite programs and documents. P/q grading.

BE164A WordPerfect, 1 cr. ONLINE COURSE
Learn how to use WordPerfect to create professional form letters, envelopes, mailing labels, and spreadsheets. Also learn how to create styles, table of contents, indexes, web pages with Corel’s Internet Publisher, and more. P/q grading.

BE165A Keyboarding Basics, 1 cr. ONLINE COURSE
Using the computer software program FasType for Windows, learn the basic skills of touch-typing. P/q grading.

BE166A Photoshop Basics, 1 cr. ONLINE COURSE
Learn the basics of Adobe® Photoshop. Discover how to alter photographs, create digital collages, scan images and make them print properly or download efficiently on the Web. P/q grading.

BE167A Introduction to Corel QuattroPro, 1 cr. ONLINE COURSE
Learn to use QuattroPro to set up fully formatted spreadsheets quickly and efficiently. Learn how to calculate simple mathematical formulas and how to automatically create powerful formulas and build charts from the data. P/q grading.
Course Descriptions

BE168A Basic A+ Certification: Hardware I, 1 cr. ONLINE COURSE
This course teaches the student how to configure and troubleshoot the hardware common to virtually every personal computer, including microprocessors, RAM, power supplies, motherboards, BIOS, CMOS, floppy drives, and hard drives. P/q grading.

BE169A Intermediate A+ Certification: Operating Systems, 1 cr. ONLINE COURSE
This continuing course will teach DOS; DOS memory management; Windows 3.x tweaking and troubleshooting; and Windows 9x installation, optimization, and troubleshooting. Discussion will also include detail partitioning and formatting drives, and installation and troubleshooting issues with Plug and Play. P/q grading.

BE171A Advanced A+ Certification: Hardware II & Operating Systems II, 1 cr. ONLINE COURSE
This course will go through an extensive set of technologies, including SCSI, video, modems, printers, multimedia, portable PCs and networking. This course completes student understanding of the hardware and operating systems tested on the A+ Certification exams. P/q grading.

BE181A Introduction to the Internet, 1 cr. ONLINE COURSE
Master the in’s and out’s of the Internet with this informative, behind-the-scenes look at the World Wide Web, e-mail, Gopher Space, newsgroups, FTP, chat, telephony, Telnet, and more. P/q grading.

BE182A Creating Web Pages, 1 cr. ONLINE COURSE
Learn how to design, create, and post a site on the Internet’s World Wide Web. Discover low-cost marketing techniques and search engine strategies. P/q grading.

BE183A Advanced Web Pages, 1 cr. ONLINE COURSE
Enhance a website by learning how to incorporate tables, forms, frames, audio, scrolling text and interactive buttons, counters, cooperative banner ads, digital cash capabilities, and more. P/q grading.

BE184A Creating Web Graphics, 1 cr. ONLINE COURSE
Learn how to create stunning titles, logos, icons, buttons, backgrounds, animated images, drop shadows, 3-D effects, and more. Learn strategies to keep image sizes as small as possible and how to work with interlacing, transparent backgrounds, and color palettes. P/q grading.

BE185A Microsoft® FrontPage, 1 cr. ONLINE COURSE
Learn how FrontPage makes it easy to create and upload professional web sites without programming. Also learn how to select a web host and several low-cost marketing strategies.

BE186A JavaScript, 1 cr. ONLINE COURSE
Learn how to spiff up web pages with effects like MouseOvers; PopUps and alerts and hot links; scrolling messages; navigation enhancements; basic forms and so on with JavaScript. P/q grading.

BE187A Java Programming for the Web, 1 cr. ONLINE COURSE
Add animated presentations, interactive tutorials, computer-based simulations, or games to a web site using Java. Learn the programming fundamentals required to help to create and integrate Java applets to a web site. P/q grading.

BE188A CGI Programming for the Web, 1 cr. ONLINE COURSE
Learn how to make a web site fun, interactive, and informative with CGI. How to use CGI and the Perl programming language to work with cookies and forms and to build a searchable database, bulletin board, and e-mail autoresponder. P/q grading.

BE189A Using America Online, 1 cr. ONLINE COURSE
Learn how to install or upgrade, customize, work with e-mail and navigate the web, chat, and use message boards with AOL. P/q grading.

BE191A Getting Organized With Outlook, 1 cr. ONLINE COURSE
This course will help to use Outlook to get the most out of e-mail communications and contact lists, schedule appointments, track tasks and projects, and organize information so it is at the student’s fingertips.

BE192A Achieving Top Search Engine Positions for the Web Site, 1 cr. ONLINE COURSE
With nearly 90% of web traffic coming from search engines, the most important thing to increase a Web site’s traffic is to increase the search engine ranking. Learn strategies to achieve a top 10 position with the major search engines. Students will receive free access to monitor their positions and marketing techniques.

BE204A Business Professionalism III, 1 cr. Continuation of BE104A.

BE205A Business Professionalism IV, 1 cr. Continuation of BE204A.

BE208A Business Professionalism III, 0 cr. Same as BE204A.

BE209A Business Professionalism IV, 0 cr. Same as BE205A.

BE210A Advanced WordPerfect®, 3 cr. Further study and practice using WordPerfect® brand software.
BE235A Administrative Assistant Practicum, 5 cr.
Practical field experience arranged to include office work, direct leadership, and procedures related to career work. Prerequisite: Permission of the instructor.

BE243A 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.

BE253A Spreadsheet Applications, 3 cr.
Provides the student with hands-on training in the use of popular spreadsheet software.

BE263A Advanced Lotus®, 2 cr.
Continuation of BE253A, including in-depth study of the use of spreadsheets and their applications in solving tax, cost accounting and other accounting problems.

Business General

BS101A Orientation to College, 0 cr.
An introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q Grading.

BS102A 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.

BS103A Computer Applications in Business, 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.

BS104A Human Relations, 3 cr.
Same as BS102A.

BS105A Web Page Design, 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.

BS106A Introduction to Computers/Information Systems, 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.

BS107A 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.

BS109A 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.

BS111A 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.

BS113A 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.

BS115A Developing a Collaborative Workforce, 1 cr.
Basic principles for a collaborative workplace, giving recognition, influencing for win-win outcomes and coaching to bring out the best in others.

BS116A Personal Strategies, 1 cr.
Developing personal strategies for change and leadership; the leader in each of us; personal strategies for navigating change; managing priorities; and handling emotions under pressure.

BS117A Effective Leadership Development, 3 cr.
Leadership personality, personal philosophy and agenda, relationships and integrity are the basic skills of leadership that empowers participants to delineate leadership from management.

BS118A Managing Change, 1 cr.
Change as it relates to the work group supervisor. Facilitating change by understanding the issues; preparing and helping people through change situations. Topics include skills for change, preparation and implementing action, the three stages of change, providing a vision for the future and specific action plans to implement the change.

BS121A Business Seminar II, 1 cr.
Continuation of BS111A. Presents students with job-seeking skills including resume preparation and interview training.

BS123A 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.

**BS127A Managing for 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 Baldridge Award will be discussed. Participants will prepare quality improvement plans for their work groups.

**BS128A Employee Training, 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.

**BS131A Leadership Seminar I, 1 cr.**
Course helps students learn to identify their own leadership styles and allows students to identify their leadership strengths and areas where improvement might be needed.

**BS133A Introduction to Business, 3 cr.**
A study of the business system: environment, ownership, management, personnel, information systems, marketing, finance, law, ethics, control and taxation.

**BS137A Time Management, 1 cr.**
Methods, tools and techniques for productive time management through a practical approach for controlling daily events. Planning and prioritizing events, values and goals, time wasters, control devices and daily task lists.

**BS138A Stress Management, 1 cr.**
Strategies for supervisors to deal with stress personally and in the work group. Sources, symptoms and consequences of chronic stress. Practice in stress prevention and reduction actions and work group stress reduction plans.

**BS141A Leadership Seminar II, 1 cr.**
Students analyze management and leadership styles by interviewing managers within various organizations to assess different management styles and their effectiveness.

**BS143A Sales Principles, 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.

**BS150A Independent Study in Business, 1 cr.**
Independent study or a special project in business.

**BS153A Business Mathematics, 3 cr.**
Reviews the fundamentals of the mathematical process with added instruction in percentages, interest and payroll taxes.

**BS156A Production Activity Control, 3 cr.**

**BS163A Personal Finance, 3 cr.**
The basics of budgeting and buying, the intricacies of home ownership, income tax and investments and the use of insurance, wills and trusts.

**BS183A Sales Management, 3 cr.**
Techniques for developing and managing a sales organization are covered.

**BS203A Advanced Computer Applications in Business, 3 cr.**
Covers communications, networks, Internet, multimedia and accessories, as well as more advanced levels of operating systems and application software in a problem-solving environment. Prerequisite: BS103A or BS106A or equivalent.

**BS205A Business Practicum, 5 cr.**
On-the job training, usually full-time, in a small business or related enterprise.

**BS211A Business Seminar III, 1 cr.**
Continuation of BS121A.

**BS213A 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.

**BS229A 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.

**BS233A Marketing, 3 cr.**
The 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.

**BS243A 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.

**BS250A Fundamentals of Purchasing Management, 3 cr.**
The basic functions, terminology and systems used in a modern purchasing department. Includes supplier analysis,
negotiation techniques and administration of a purchasing department for both service and manufacturing firms.

**BS251A Inventory Management and Planning, 3 cr.**
Techniques used in controlling inventory including raw materials, work in process and finished materials. Inventory levels and their impact on profits and manufacturing operations.

**BS252A Advanced Purchasing Operations, 3 cr.**
Material flow, inventory, basic uses of SPC and MRP, forecasting, supplier relationships, use of computer systems and control and disposal issues of materials as they relate to purchasing.

**BS253A Entrepreneurship, 3 cr.**
Introduces the basic fundamentals of business; basic business and economic concepts and terminology, management, marketing, finance, human resources management, accounting and other business areas.

**BS263A Legal Environment of Business, 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.

**BS283A Real Estate, 3 cr.**
Fundamental principles of real estate evaluation, brokerage, financing, structure, construction and real estate law.

**BS284A Real Estate Prelicensure, 3 cr.**
This course is approved by the Iowa Real Estate Commission as an accredited 60 hour real estate salesperson prelicense class. The program has been developed to better prepare prospective licensees to enter the real estate profession and to pass the State of Iowa exam.

**BS285A Principles of Insurance, 3 cr.**
Examination of the basic ideas, problems and principles found in all types of insurance and methods of handling risk. Special emphasis will be on analyzing the problems and issues which establish the basic need for insurance.

**BS292A Business Statistics, 3 cr.**
See BS294A.

**BS293A Management, 3 cr.**
Introduces modern management background, organization and principles, managerial planning and control policies and procedures of business firms.

**BS294A 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: MA108A or 2 years of high school algebra.

**BS295A Business Statistics II, 3 cr.**
A continuation of BS294A or MA294A. Applications of statistics in a business context and use of computer software for statistics. Prerequisite: BS294A or MA294A.

### Child Care/Early Childhood Education

**CC100A Orientation to College, 0 cr.**
Introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q grading.

**CC102A Child Growth and Development, 3 cr.**
Studies physical/motor, social/emotional, intellectual/cognitive development of the young child from birth through adolescence.

**CC110A Child Care Professionals I, 1 cr.**
Emphasizes problem solving skills and team building through a variety of group activities. Prerequisite: Enrollment in Child Care program.

**CC111A Child Development Study Tour, 1 cr.**
Visits designed to identify professional responsibilities in a variety of child care settings. Observation and interpretation of children's behavior will be practiced.

**CC112A Child Health, Safety and Nutrition, 3 cr.**
Studies information about current concepts in the fields of health, safety and nutrition and their relationship to the young child.

**CC114A Principles of Child Care, 3 cr.**
Introduces historical as well as contemporary influences on child care, types of child care and relationships with parents, family and communities.

**CC120A Child Care Professionals II, 1 cr.**
Emphasizes human relations skills including communication, leadership, personal appearance, etiquette and job seeking skills. Prerequisite: Enrollment in Child Care program.

**CC121A Practicum I, 2 cr.**
Supervised experience in a child care facility. Planning, preparation and presentation of developmentally appropriate activities to facilitate children's social, emotional, intellectual and physical growth and utilizing appropriate guidance techniques. Prerequisites: CC102A, CC111A, CC112A, CC114A, PE213A, and must be taken with or after CC123A, CC124A and CC125A.

**CC123A Play and Creative Arts for Children, 3 cr.**
The role of play and creativity. Emphasizes the development of early childhood teaching skills in the areas of art, music, creative movement and language arts. Prerequisites: CC102A, CC111A, CC114A.
**Course Descriptions**

**CC124A  Inquiry Activities, 3 cr.**
Emphasizes the development of early childhood teaching skills in the areas of math, science, social studies, large and small motor activity. Prerequisites: CC102A, CC111A, CC114A.

**CC125A  Behavior and Guidance of Children, 3 cr.**
Studies behavioral principles applicable to children, appropriate methods of discipline and various guidance techniques that may be used with children. Prerequisites: CC102A, CC111A, CC114A.

**CC134A  Curriculum Planning, 3 cr.**
Examines and evaluates early childhood curriculum models and methods leading to the development and implementation of appropriate curricula for young children. Prerequisites: CC102A, CC111A, CC121A, CC123A, CC125A, PE213A.

**CC141A  High Scope Educational Approach, 1 cr.**
Study of the open framework which organizes children’s and teachers’ environment, daily routine and interactions. Includes systematic method planning, organizing and carrying out responsibilities.

**CC150A  Independent Study - Child Development, 1 cr.**
Assisting and observing creativity and innovation at work in children’s lives through art.

**CC210A  Early Childhood Professionals I, 1 cr.**
Emphasizes problem solving skills and team building through a variety of group activities. Prerequisite: Enrollment in Child Care or Early Childhood Education programs.

**CC211A  Practicum II, 2 cr.**
Supervised experience in a child care center, kindergarten, early childhood special education classroom, or adolescent facility. Expands upon student’s Practicum I responsibilities. Prerequisites: Completion of semesters I and II Child Care course work.

**CC213A  Contemporary 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.

**CC220A  Early Childhood Professionals II, 1 cr.**
Emphasizes human relations skills including communication, leadership, personal appearance, etiquette and job seeking skills. Prerequisite: enrollment in Child Care or Early Childhood Education programs.

**CC221A  Practicum III, 1 cr.**
Supervised experience in a child care facility. Student assists the manager in the planning, direction and implementation of the curriculum and the overall operation. Prerequisites: CC211A, CC213A; must be taken with or after CC223A.

**CC223A  Administration of Programs for Children, 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. Prerequisites: CC211A, CC213A.

**Chiropractic Technology**

**CT143C  Chiropractic Assisting I, 3 cr.**
Fundamental screening and physical assessment of the chiropractic patient. Methods of accurate documentation. History and philosophy of chiropractic medicine will be studied.

**CH153C  Chiropractic Assisting II, 3 cr.**
Development of skills in orthopedic and neurological assessment of chiropractic patients. Range of motion testing, motor function and strength evaluation, posture analysis and screening, dermatome distribution and reflex testing. Physiotherapy procedures used in a chiropractic setting will be learned through practical application.

**CT163C  Chiropractic Laboratory Procedures, 2 cr.**
Training in lab work performing routine urinalysis, complete blood counts and blood collection. Normal values will be studied.

**CT176C  Chiropractic Practicum, 3 cr.**
On-the-job training in a chiropractic office or similar location.

**Communications-General**

**CM003H  Reading Improvement I, 1 cr.**
An individualized developmental studies course in reading that emphasizes comprehension, vocabulary and reading rate.

**CM011H  Writing Improvement, 2 cr.**
Developmental writing course with a general grammar review including usage, punctuation and spelling. Prewriting techniques, editing strategies and paragraph writing for different purposes are covered.

**CM020H  Communication Vocational Refresher, 2 cr.**
Developmental writing course for vocational students. Individualized course in general grammar review including usage, punctuation and spelling. This includes applying skills in context.

**CM101A  Successful Learning, 1 cr.**
Students master academic and personal skills needed to succeed in higher education and in life.

**CM104A  Library Orientation, 1 cr.**
Introduction to use of a college library. P/Q grading.
CM105C Communication Skills, 2 cr.
Refining of skills in reading, writing and listening as they apply to the student’s vocational needs.

CM111A Reading Improvement II, 1 cr.
An individualized elective course in reading. Prerequisite: CM003H or satisfactory assessment score.

Computer Aided Drafting and Design

CD114A Technical Drafting and Computer Aided Drafting (CAD) I, 4 cr.
Introduction to graphic language, equipment and the basic techniques used to create technical drawings. CAD work stations will be used to create basic entities and teach CAD techniques. Geometric construction will be taught on conventional equipment and on the CAD system in a lecture-laboratory format.

CD123A 3D Graphics and Animation, 3 cr.
An introductory course in desktop computer three-dimensional modeling and animation. Course includes color, lighting and motion theory; model creation including lofting; materials and mapping; and animation.

CD124A Technical Drafting and Computer Aided Drafting (CAD) II, 3 cr.
Continuation of CD114A, including multi-view projections, sectional views, auxiliary views and revolutions.

CD126A AutoCAD® Operating Systems and Applications 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.

CD127A AutoCAD® Operating Systems and Applications II, 1 cr.
Continuation of CD126A, plus introductory dimensioning, blocks, attributes, data extraction, macros, menus and AutoLISP introduction.

CD133A 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.

CD205A CADD Practicum, 5 cr.
On-the-job experience related to drafting or graphics with a participating business, company, or agency. Prerequisite: CD114A.

CD206A CADD Seminar, 1 cr.
Career exploration and development of techniques for preparing resumes, seeking jobs, interviewing for jobs. Job keeping skills are included. Prerequisite: CD114A.

CD213A Drafting Applications and CADD, 3 cr.
Descriptive geometry fundamentals and applications are presented. 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. Prerequisite: CD124A.

CD214A AutoCAD® Operating Systems and Applications I and II, 2 cr.
Same as CD126A and CD127A combined.

CD224A Design Applications and CADD, 4 cr.
Continuation of the study of graphical techniques in business and industrial environments. Architectural and civil graphics applications on CADD are emphasized. Prerequisite: CD103A.

CD233A Applied Mathematics and CADD Techniques, 2 cr.
Mathematical procedures and methods are applied to technical graphics problems in a lecture format. Unit vectors and matrices and their use in computer graphics software are surveyed. Graphical mathematics, curve fitting, graphical statistics and graphical data presentation using MS Excel are emphasized.

CD235A Independent Study, 2 cr.
Investigation and study of a current problem or topic in the computer aided drafting and design field. Permission of instructor required.

Computer Science

CS101A Computer Familiarization, 1 cr.
Course structured to make students operationally experienced with microcomputers. Emphasis is on actual hands-on experience with IBM microcomputer and the usage of word processors and spreadsheets.

CS113A Introduction to Data Processing, 3 cr.
Extensive discussion of computer and information processing and the study of both computer hardware and software in the data processing industry. Students learn to use DOS and Windows 95 as well as a word processing, a spreadsheet and a data base program.

CS138A Computer Science I, 3 cr.
Introduction to the concepts of computer programming presenting modern structured design and techniques using Visual BASIC 6.0 programming language.

CS150A Independent Study in Computers, 1 cr.
Independent study or a special project in computer science.
Using the Internet, 2 cr.
Learning to use the Internet in a productive and satisfying way, including basic tools, services and methods used for working with the Internet, including resources available and communication via the Internet. Offered based on student demand.

Computer Programming-COBOL, 3 cr.
Introduces the COBOL programming language, typical applications and program writing for business, including editing data, arithmetic statements, 'if' statements, flowcharting, branching, etc.

Computer Programming- 'C' Language, 3 cr.
Structured language which is powerful, efficient and versatile. The student can write programs from very simple applications to advanced editors, operating systems and sophisticated application programs.

Database Information Systems, 3 cr.
Database management concepts using commercially available software. Topics include terminology, organizing data and designing files, report and menu generation, indexing, selection/queries, browsing, file operations, and program development.

Computer Science Practicum, 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.

Computer Science II, 3 cr.
Continuation of concepts of computer programming with modern structured design and techniques taught in CS138A, which is prerequisite.

Computer Programming-Pascal, 3 cr.
Programming using the Pascal programming language.

Problem Solving Logic/Statistical Applications, 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.

Computer Programming-RPG II, 3 cr.
Provides the student with an efficient, easy-to-use technique for developing computer programs for the solution of business oriented problems. Student is required to complete a series of entries on predefined specification forms that basically define the input, processing and output to be produced.

Blueprint Reading and Sketching, 2 cr.
Studies the builders' visual language and communication.

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

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

Framing Techniques, 8 cr.
Study of building framework, including sidewalls and roof construction. Lecture and laboratory.

Related Building Trades, 4 cr.
Related building trades of plumbing, heating and electrical are covered. Lecture and laboratory.

Construction Welding, 1 cr.
Welding techniques applicable to the construction trade.

Exterior Finishing, 3 cr.
Exterior finish work on residential and commercial structures. Lecture and Laboratory.

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

Construction Internship, 6 cr.
On-the-job training in the student's field of interest.

Interior Wall Coverings, 3 cr.
Covers interior wall coverings and their application and thermal and sound insulation. Lecture and laboratory.

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

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

Independent Study — Corrections, 1 cr.
Course taken to investigate substantive issues in the field of corrections or to begin work with clients in a limited capacity.

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

**CJ113A Introduction 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.

**CJ116A Introduction to Criminal Investigation, 3 cr.**
Covers fundamentals of investigation including interviewing and interrogating; collecting and preserving evidence; modus operandi; crime scene search, etc.

**CJ121A Seminar I — Law Enforcement, 1 cr.**
Working professionals in law enforcement design a course of study for the students. The content of this course varies with time.

**CJ123A Juvenile Delinquency, 3 cr.**
Juvenile justice system is examined from historical, constitutional and operational perspectives. Theories concerning juvenile delinquency are explored.

**CJ126A 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.

**CJ128A Criminal Justice Seminar I — Corrections, 1 cr.**
Students explore human services topics. This is often done with the assistance of correctional professionals or human services personnel in related fields.

**CJ202A 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.

**CJ203A Field Experience II — Law Enforcement, 3 cr.**
Continuation of CJ202A.

**CJ204A Law Enforcement Internship II, 2 cr.**

**CJ205A Field Experience — Criminal Justice, 5 cr.**
Course replaces CJ202A and 203A, or 206A, or 232A and 252A, for students who wish to take all their experience at one time.

**CJ206A Field Experience — Criminal Justice, 6 cr.**
Course replaces CJ202A and 203A, or 205A, or 232A and 252A, for students who wish to take all their experience at one time.

**CJ211A Seminar II — Law Enforcement, 1 cr.**
See CJ121A.

**CJ213A Introduction 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.

**CJ215A Police Operations and 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.

**CJ217A 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.

**CJ220A Corrections in the Community, 3 cr.**
Presents the theoretical and philosophical basis of probation, parole and other community based correctional programs.

**CJ223A Drug Use and Abuse, 3 cr.**
Designed to help the student understand sociological aspects of drug use, abuse and treatment.

**CJ226A Criminology, 3 cr.**
Scientific study of the nature and causes of criminal behavior and social deviance.

**CJ228A Criminal Justice Seminar II — Corrections, 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.

**CJ232A 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.

**CJ252A Field Experience II — Corrections, 3 cr.**
Continuation of CJ232A.

**Developmental Studies**
Developmental courses are listed under the Communications-General and Mathematics areas.

**Education**

**ED101A Orientation to College, 0 cr.**
An introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q grading.

**ED114A Introduction to Education, 4 cr.**
Introductory professional education course with an overview of the foundations of education in America, including some
current professional, social and philosophical issues in education. Students will do some observation and assistance in a K-12 classroom.

**ED203A 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 Graphics**

**EG113A Engineering Graphics I, 3 cr.**
Introduction to the graphic language, equipment and basic techniques used to create technical drawings. Conventional drafting equipment will be used and 2 1/2D and 3D CAD Techniques will be taught. Sketching, geometric construction, multi-view drawings and use of CAD work station are emphasized.

**EG123A Engineering Graphics II, 3 cr.**
Continuation of EG113A

**EG127A Engineering Problems, 3 cr.**
Special topics in engineering graphics

**English**

**EN110A Introduction to Literature, 3 cr.**
Examines literary elements of three major genres of literature—short fiction, poetry, drama and film. Includes both contemporary and traditional works.

**EN113A English 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 CM011H.

**EN123A English Composition II, 3 cr.**
A continuation of English Composition I with emphasis on research and documentation as well as literary appreciation and analysis. Prerequisite: EN113A.

**EN133A American Poets and Poetry, 3 cr.**
Survey of modern American poetry. Examines both the works and lives of 13 of America’s greatest poets.

**EN150A Independent Study in English, 1 cr.**
Independent study or a special project in English.

**EN213A American Literature I, 3 cr.**
Explores major American writers (including Native Americans) and their contributions to American letters from Puritan times to 1865.

**EN223A American Literature II, 3 cr.**
Explores major American writers and their contributions to American letters from the post-Civil War era through modern periods.

**EN233A Introduction to Short Story, 3 cr.**
The evolution of the short story as a literary form, with emphasis on analysis and appreciation.

**EN253A World Literature I, 3 cr.**
Literature from the Ancients, classical Greece and the Renaissance.

**EN273A World Literature II, 3 cr.**
Literature from the Enlightenment through Romanticism, Realism and Naturalism to Modernism.

**Environmental Science**

**EV114A Environmental Studies I, 4 cr.**
Introduction to ecology, population dynamics, human ecology and environmental law. Lecture and laboratory.

**EV124A Environmental Studies II, 4 cr.**
Introduction to global resources, resource management, environmental pollution and pollution control. Lecture and laboratory.

**EV203A Environmental Seminar, 1 cr.**
**EV204A Environmental Seminar, 1 cr.**
Career exploration and development of job seeking skills in preparation for cooperative education.

**EV234A Introduction to Environmental Technology, 4 cr.**
Introduction to environmental impact, air pollution, water pollution and hazardous materials. Lecture and laboratory.

**EV244A Environmental Technology Techniques, 4 cr.**
Environmental regulation, environmental safety, pollution control and waste management. Lecture and laboratory.

**EV254A Introduction to Natural Resources Management, 4 cr.**
Introduction to hydrospheric, lithospheric and atmospheric resources. Lecture and laboratory.

**EV264A Natural Resources Management Techniques, 4 cr.**
Management of wildlife, forest and recreational lands, agricultural and rangeland, and fisheries. Lecture and laboratory.

**EV274A Environmental Practicum, 4 cr.**
Hands-on experience in a field or laboratory setting through a cooperative education agreement between the college and the sponsoring agency.
**Farm Equipment Technology**

**FM111C Agricultural Equipment, 4 cr.**
Assembly, maintenance and adjustment of harvesting, planting, tillage and spraying equipment. Lecture and laboratory.

**FM113C Electricity I, 4 cr.**
Fundamentals of DC electricity as applied to farm equipment, including lighting, charging, ignition and starting are covered. Lecture and laboratory.

**FM116C Fundamentals of Engine Overhaul, 6 cr.**
Fundamentals of engine overhaul with the emphasis on diesel and gasoline engines. Lecture and laboratory.

**FM121C Air Conditioning, 4 cr.**
Theory, diagnosis and servicing of the complete air conditioning system as applied to farm equipment. Lecture and laboratory.

**FM123C 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.

**FM126C Differentials and Final Drives, 6 cr.**
A study of 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. Lecture and laboratory.

**FM127C Transmissions, 7 cr.**
A study of technical principles and their application to transmissions and clutches, including diagnosis, repair, adjustment and overhaul procedures. Lecture and laboratory.

**FM131C Hydraulics, 6 cr.**
Hydraulic systems and components used on modern farm equipment with emphasis on systems analysis and testing. Lecture and laboratory.

**FM132C Electricity II, 4 cr.**
Continuation of FM113C.

**FM211C Engines II, 5 cr.**
Continuation of FM112C including design and operation of diesel engines and rebuilding and troubleshooting procedures. Lecture and laboratory.

**FM212C Diesel Fuel Systems, 6 cr.**
Repair and calibration of diesel fuel injection pumps and nozzles. Lecture and laboratory.

**FM213C Dealership Experience, 2 cr.**
Same as FM123C.

**FM221C Fuel System Testing and Calibration, 6 cr.**
Studies the troubleshooting and calibration of injection pumps and nozzles. Lecture and laboratory. Prerequisite: FM212C.

**FM223C Sales Merchandising and Parts, 2 cr.**
Teaches how to fill out needed parts orders for any given repair job and how to merchandise parts for greater sales.

**Fine Arts—General**

**FA121A Fine Arts Interim, 1 cr.**
Supplemental enrichment course relating to the fine arts which includes special projects. P/Q grading.

**Foreign Language**

**FL101A Survival Spanish for Law Enforcement, 1 cr.**
Oral introduction to Spanish for law enforcement students.

**FL103A Spanish Seminar, 1 cr.**
Special projects within a small group.

**FL112A Elementary German IA, 2 cr.**
Introduction to the German language and culture; practice in all the basic skills. When combined with FL113A, is the same as FL114A.

**FL113A Elementary German IB, 2 cr.**
Continuation of FL112A.

**FL114A Elementary German I, 4 cr.**
Introduction to the German language and culture; practice in all the basic skills.

**FL116A Elementary Spanish IA, 2 cr.**
Introduction to the Spanish language and culture; practice in all the basic skills. When combined with FL117A, is the same as FL118A.

**FL117A Elementary Spanish IB, 2 cr.**
Continuation of FL116A.

**FL118A Elementary Spanish I, 4 cr.**
Introduction to the Spanish language and culture; practice in all the basic skills.

**FL119A Elementary Spanish IA, 3 cr.**
Introduction to the Spanish language and culture; practice in all basic skills. When combined with FL129A, same as FL118A.

**FL120A Elementary Spanish IB, 3 cr.**
Continuation of FL119A. When combined with FL119A, is the same as FL118A.

**FL122A Elementary German II A, 2 cr.**
Continuation of FL113A. When combined with FL123A, is the same as FL124A.

**FL123A Elementary German II B, 2 cr.**
Continuation of FL122A.
FL124A  Elementary German II, 4 cr.
Continuation of FL114A.

FL126A  Elementary Spanish IIA, 2 cr.
Continuation of FL117A. When combined with FL127A, is the same as FL128A.

FL127A  Elementary Spanish IIB, 2 cr.
Continuation of FL126A.

FL128A  Elementary Spanish II, 4 cr.
Continuation of FL118A, which is a prerequisite.

FL150A  Independent Study in Foreign Languages, 1 cr.
Independent study or a special project in a foreign language.

FL214A  Intermediate German I, 4 cr.
Review and expansion of grammar, selected reading and further practice in oral and written communication.

FL218A  Intermediate Spanish I, 4 cr.
Review and expansion of grammar, selected reading and further practice in oral and written communication. Prerequisite: FL128A.

FL224A  Intermediate German II, 4 cr.
Continuation of FL214A.

FL228A  Intermediate Spanish II, 4 cr.
Continuation of FL218A, which is a prerequisite.

Geographic Information Systems

GT113A  Introduction to Geographic Information Systems, 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 a lecture-laboratory format.

GT123A  GIS Applications I, 3 cr.
Introduces the underlying principles and logic of ARC/INFO as a geographical information manager. Focuses on entering and managing spatial and attribute data. Lecture and laboratory.

GT134A  Fundamentals of Surveying - GPS, COGO, 4 cr.
Introduction to various positioning techniques from traditional surveying practices to global positioning systems. GPS equipment will be used to collect data for transfer into coordinate geometry software, followed by development of 3D computer models. Lecture and laboratory.

GT133A  Geography, 3 cr.
Survey course introducing students to the geographical study of the relationship of humans to the environment and the spatial patterns of human activities.

GT153A  Digital Cartography, 3 cr.
The concepts and techniques of creating digital models and maps from measurements on the earth. Sources of data, data models and database concepts are introduced. Coordinates, ellipsoids, geoids, transformations and projections are studied. ARC/INFO is introduced to reinforce concepts and techniques.

GT213A  GIS Applications II, 3 cr.
More advanced principles and logic of ARC/INFO and its modules as geographical information managers. Digital photogrammetry and remote sensing software will also be used to solve GIS problems. The course focuses on converting spatial data and attributes into useful information.

GT223A  GIS Land Information and Resource Management, 3 cr.
The management relationships of GIS, LIS and natural resources. Emphasizes the study of the structure of geospatial databases to allow better management of resources for sustainable purposes.

GT233A  Photogrammetry and Remote Sensing, 3 cr.
An introduction to the basic principles of photogrammetry, remote sensing and image interpretation. Digital photogrammetry and digital remote sensing software will be used for reinforcement and practice of those concepts.

Gerontology

GR102A  Social Gerontology, 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.

GR111A  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.

GR123A  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.

GR151A  Gerontology Seminar, 1 cr.
Taken upon completion of required courses for the licensure examination for nursing home administration, this course is
an intensive review of materials relative to the examination. The review includes discussion, written examinations, one-on-one tutoring and a mock licensure examination.

**Graphic Design and Technology**

**BG118C Printing Techniques I, 4 cr.**
Emphasis of this course is on broad based, pre-press issues including orientation to desktop publishing; composition; job engineering; image capture; basics of press binding and finishing; and digital output. Introductory hands-on experience with a sheetfed press is included.

**BG128C Printing Techniques II, 4 cr.**
Focus of the course is on sheetfed press operations including sheet control; plate and blanket mounting; operating the inking and dampening systems; aligning/adjusting cylinders; and press makeready.

**Health and Life Services—General**

**HL101A Emergency Care, 2 cr.**
Provides instruction regarding the delivery of first aid to the injured. Students obtain certification in American Red Cross Community First Aid and Safety and American Heart Association CPR.

**HL103A Pre-Nursing Orientation, 0 cr.**
Introduction to academic and personal information relating to Iowa Lakes Community College. This information is vital for student success. P/Q grading.

**HL104A Pre-Radiographic Technology Orientation, 0 cr.**
Introduction to academic and personal information relating to Iowa Lakes Community College. This information is vital for student success. The collaborative program with Iowa Central Community College will be explained. Refer to the Iowa Lakes Bulletin for further information. P/Q grading.

**HL105A Pre-Medical Laboratory Technology Orientation, 0 cr.**
Introduction to academic and personal information relating to Iowa Lakes Community College. This information is vital for student success. The collaborative program with Iowa Central Community College will be explained. Refer to the Iowa Lakes Bulletin for further information. P/Q grading.

**HL106A Pre-Occupational Therapy Orientation, 1 cr.**
Introduction to academic and personal information relating to Iowa Lakes Community College. This information is vital for student success. The collaborative program with Western Iowa Technical Community College will be explained. Refer to the Iowa Lakes Bulletin for further information. P/Q grading.

**HL107A Pre-Physical Therapy Assistant Orientation, 0 cr.**
Introduction to academic and personal information relating to Iowa Lakes Community College. This information is vital for student success. The collaborative program with Western Iowa Technical Community College will be explained. Refer to the Iowa Lakes Bulletin for further information. P/Q grading.

**HL108A Pre-Health Information Technology Orientation, 0 cr.**
Introduction to academic and personal information relating to Iowa Lakes Community College. This information is vital for student success. This collaborative program with Northwest Iowa Community College will be explained. P/Q grading.

**HL111A Human Growth and Development — Adult, 1 cr.**
Exploration of the normal characteristics, physical, social and emotional development of individuals from the young adult through the aged adult.

**HL112A Human Growth and Development, 3 cr.**
Exploration of the normal characteristics, physical, social and emotional of individuals from infancy through the aged adult. Course includes discussion of various theorists’ views of the stages of growth and development through the lifespan.

**HL118A 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. Included is a review of the digestive process and food selection related to health promotion throughout the life cycle.

**HL119A Normal Nutrition A, 1 cr.**
**HL120A Normal Nutrition B, 2 cr.**
Additional information for the student who has not had the full course in normal nutrition.

**HL223A 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.

**Health Care Administration**

**HC100A Orientation to College, 0 cr.**
Introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q Grading.

**HC111A 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.
Course Descriptions

HC113A Health Care Administration I, 3 cr.
Overview of the health care administration field designed to give a basic understanding of the history, present and future, of health care facilities. Organizational structure and administration of health care facilities is emphasized.

HC122A Health Care Practicum II, 3 cr.
Examines the nature, scope and performance of each segment of the team providing services to the resident-client.

HC123A 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. No prerequisite.

HC132A Health Care Practicum III, 2 cr.
Examines the planning, operation and maintenance of the physical plant, including planning for emergency situations.

HC133A Health Care Administration III, 3 cr.
Building design, layout and facility maintenance; physical plant construction and financing.

HC211A 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.

HC212A Health Care 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.

HC222A Health Care Practicum V, 2 cr.
Studies the sources of institutional revenue and expense.

HC226A Legislative and Political Aspects of Health Care Administration, 3 cr.
Overview of national organizations representing health care institutions; of the organization of federal, state and local government; and of legislation relating to health care institutions. Health planning and securing funds through grants.

HC231A Health Care Administration Seminar, 1 cr.
Seminar for those planning to take the Iowa state board examinations for licensure.

HC233A Health Care Practicum VI, 1 cr.
Observation of all departments within residential care facilities, hospitals and other health care facilities.

Health Occupations

HO012P Health Careers, 0 cr.
A survey of opportunities in health careers for secondary students.

HO013P Preparatory Health Occupations, 0 cr.
Red Cross certificate in Cardiopulmonary Resuscitation (CPR) and Standard First Aid and Personal Safety will be earned. Course includes an awareness of physical and mental health needs and the characteristics of communicable disease; artificial ventilation, cardiac compression and relief from airway obstruction; care of a victim experiencing shock, wounds, fractures, poison, or heat and cold related injuries.

HO016P Health and Emergency Skills I, 0 cr.

HO023P Preparatory Health Occupations, 0 cr.
Red Cross certificate in Advanced First Aid and Emergency Care will be earned. Course covers emergency childbirth, sudden illness, dressings and bandages, emergency rescue and transfer, and water accidents.

HO101A Emergency Medical Technician Basic Laboratory, 1 cr.
See HO105A.

HO102A Nurse Aide I, 3 cr.
The academic component of a 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 NU103A. Upon satisfactory completion of both courses, which meet both federal and state requirements, the student is eligible to write the state-approved competency examination and skill test for certification.

HO103A 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: HO102A.

HO105A Emergency Medical Technician Basic, 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.

HO123C First Responder, 3 cr.
Students will learn recognition of symptoms of illness and injuries, and proper procedures for basic emergency care. The curriculum for this course is the national curriculum of the U.S. Department of Transportation, National Highway Traffic Safety Administration and the U.S. Department of Health and Human Services, Maternal and Child Health Bureau.

HO142C Medication Aide, 2 cr.
This course prepares nurse assistants/residential attendants to administer oral medication in long-term care facilities. The 50 hour course is for those who meet course requirements as outlined by the Iowa Department of Public Health.
Course Descriptions

HO143C Rehabilitation Aide, 3 cr.
This 60 hour course 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. It is assumed that persons taking the course have basic knowledge and skills at the nurse assistant level and have had experience working with chronically ill or aging residents/patients.

HO152C Supervision in Health Care, 2 cr.
This course is designed to assist RN’s and LPN’s in gaining knowledge and developing skills useful in managing personnel and client care.

HO202A Emergency Medical Technician Intermediate Laboratory, 2 cr.
The laboratory portion of HO203A.

HO203A Emergency Medical Technician Intermediate, 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 plus IV therapy.

Hotel and Restaurant Management

BH105A 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. ProMgmt 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.

BH106A Introduction to the 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.

BH107A 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.

BH109A 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.

BH123A 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 a ten-key calculator will be included.

BH124A Front Office Operations/Night Audit, 4 cr.
Emphasizes the efficient operation of the front office area, including greeting the guests, reservations, registrations, 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.

BH125A Food Production, 5 cr.
Preparation of menus and serving foods with aesthetic appeal for dining rooms. Emphasizes meat, vegetable and dessert cookery. Sanitation, quality and cost of foods served to consumers are stressed.

BH126C Job Seeking Skills I, 2 cr.
Students are exposed to areas of hospitality jobs through field trips and interaction with people currently in the hospitality business. The class will involve job seeking skills and include actual job research, interviewing, experience and placement for on-the-job training.

BH135A On-the-job Training, 5 cr.
On-the-job training, usually full-time, in a hotel, motel, restaurant or related business.

BH208A 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.

BH215A Purchasing for the Hospitality Industry, 3 cr.
Food service purchasing from the viewpoint of management: channels of distribution, buying techniques, specification writing and other principles needed to perform this critical activity. This course is part of the National Restaurant Association certification program.

BH216A 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.

BH217A 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.
BH226C Job Seeking Skills II, 2 cr.
Students are exposed to areas of hospitality jobs through field trips and interaction with people currently in the hospitality business. The class will involve job seeking skills and include actual job research, interviewing and placement upon graduation.

BH226A Food and 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.

BH233A Hospitality Law and Security, 3 cr.
Provides an awareness of laws concerning hotel-motel management and illustrates the possible consequences of failure to satisfy legal obligations.

Human Services/Disability Studies

HD116A Assessment and Instruction, 3 cr.
Presents the student with basic concepts of evaluation of disabled populations. A variety of standardized tests as well as situational assessment is explored. Students target behavior, write goals and objectives, and document participant progress in the helping professions. Intervention and teaching techniques are addressed.

HD123A Behavior Management, 3 cr.
Introduces students to beginning behavioral teaching methods and situations. Individual program planning and implementation in physical, social, academic, leisure, and daily living skills are included.

HD202A Introduction to American Sign Language and Deaf Culture, 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.

HD206A Basic Sign Language, 2 cr.
Presents students with basic skills in the use and understanding of signed English.

HD211A Independent Study—Human Services and Disability Studies, 1 cr.
Individualized program of study to allow the student to engage in an in-depth study of an appropriate topic.

HD212A Internship in Human Services and Disability Studies, 2 cr.
Supervised on-the-job work experience. Focus is exposure to disability groups, facility routine and application of course concepts.

HD214A Services and Vocational Planning, 4 cr.
Focus on available support resources 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.

HD224A 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.

HD234A Practicum in Human Services and Disability Studies, 4 cr.
HD236A Practicum in Human Services and Disability Studies, 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 outcomes.

Industrial Technology

TI030P Consumer Auto Maintenance, 0 cr.
Develops a better understanding of the functions of the various components of the automobile.

TI055P Introduction to Mechanics, 0 cr.
Each student performs a complete overhaul of a single-cylinder engine as a means of learning proper use of tools, shop safety, trouble diagnosis and measurement.

TI056P Automotive Systems, 0 cr.
The student develops extensive job skills in the basics of automotive systems. Prerequisite: TI030P.

TI065P Automotive Engines, 0 cr.
For students interested in a career related to the automotive industry, this course studies automotive engines.

TI066P Auto Electricity/Fuel Systems, 0 cr.
For students interested in a career in automotive technology, this course provides extensive study of electricity as it relates to the automobile.

TI100C Introduction to Trade and Industry, 1 cr.
An introductory exploratory course designed to evaluate the mechanical ability of students before entering a preparatory Trade and Industries program.

TI101C Orientation to College, 0 cr.
Introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q Grading.

TI102C Applied Mathematics, 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TI103C</td>
<td>Welding, 2 cr.</td>
<td>Principles and applications of gas and MIG welding theory, safety and shop practices are covered. Lecture and laboratory.</td>
</tr>
<tr>
<td>TI104C</td>
<td>Business Principles, 2 cr.</td>
<td>Introduction to record keeping, financing, employee benefits and employer problems.</td>
</tr>
<tr>
<td>TI105C</td>
<td>Human Relations, 2 cr.</td>
<td>Studies interaction with people on personal and business levels.</td>
</tr>
<tr>
<td>TI106C</td>
<td>Interim, 1 cr.</td>
<td>Designed to give students an opportunity to participate in non-traditional activities related to their program interest. F/Q grading.</td>
</tr>
<tr>
<td>TI107C</td>
<td>Business Principles, 2 cr.</td>
<td>Same as TI104C.</td>
</tr>
<tr>
<td>TI108C</td>
<td>Human Relations, 2 cr.</td>
<td>Same as TI105C.</td>
</tr>
<tr>
<td>TI109C</td>
<td>Applied Mathematics, 2 cr.</td>
<td>Same as TI102C.</td>
</tr>
<tr>
<td>TI110C</td>
<td>Business Principles, 2 cr.</td>
<td>Same as TI104C.</td>
</tr>
<tr>
<td>TI116C</td>
<td>Introduction to Building Trades, 1 cr.</td>
<td>An introduction to the different phases of the building trades.</td>
</tr>
<tr>
<td>TI117C</td>
<td>Introduction to Carpentry, 3 cr.</td>
<td>Designed to present the step by step procedure necessary for the construction trade, with emphasis on proper use of tools, safety and regulation.</td>
</tr>
<tr>
<td>TI121C</td>
<td>Business Principles, 3 cr.</td>
<td>Introduction to record keeping, financing, employee benefits and employer problems.</td>
</tr>
<tr>
<td>TI122C</td>
<td>Human Relations, 3 cr.</td>
<td>Studies interaction with people on personal and business levels.</td>
</tr>
<tr>
<td>TI123C</td>
<td>Communication Skills, 3 cr.</td>
<td>Developing skills in reading, writing and listening as they apply to students’ vocational needs.</td>
</tr>
<tr>
<td>TI124C</td>
<td>Related Mathematics, 3 cr.</td>
<td>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.</td>
</tr>
<tr>
<td>TI130C</td>
<td>Tech Prep Small Engine and Marine Mechanics, 3 cr.</td>
<td>For high school students, exposure to trouble shooting and repair of small engines and the opportunity to achieve a basic understanding of specific skills in the small engine and marine mechanics field.</td>
</tr>
<tr>
<td>TI131C</td>
<td>Tech Prep Construction Technology, 3 cr.</td>
<td>For high school students, experience in the various specialties within the construction technology industry. Limited skills and theory knowledge may be obtained as students assist and observe other students as they complete assigned lab projects.</td>
</tr>
<tr>
<td>TI132C</td>
<td>Tech Prep Farm Equipment Mechanics, 3 cr.</td>
<td>For high school students, exposure to agricultural equipment, welding, engines and electricity as an introduction to the farm equipment technology program.</td>
</tr>
<tr>
<td>TI133C</td>
<td>Tech Prep Motorcycle Mechanics, 3 cr.</td>
<td>For high school students, exposure to motorcycle engines, fuel systems, ignition systems, transmissions and chassis structures.</td>
</tr>
<tr>
<td>TI134C</td>
<td>Tech Prep Automotive Technology, 3 cr.</td>
<td>For high school students, experience in various specialties within the automotive repair industry. Limited skills and theory knowledge may be obtained as students assist and observe other students as they complete assigned lab projects.</td>
</tr>
<tr>
<td>TI137C</td>
<td>Tech Prep Auto Collision Basic Repair, 3 cr.</td>
<td>For high school students, this class will allow students to obtain basic skills needed for entry level auto collision employment. A combination of classroom and lab instruction will permit students to learn theory and hands-on skill development. Prerequisite: Welding training suggested.</td>
</tr>
<tr>
<td>TI138C</td>
<td>Tech Prep Auto Collision Advanced Basic Repair, 3 cr.</td>
<td>For high school students, this class will allow students to expand knowledge and skills obtained in the basic repair course. Additional areas of the auto collision industry will be introduced. Classroom and lab instruction will expose students to entry level employment skills in selected instructional areas. Prerequisite: TI137C.</td>
</tr>
<tr>
<td>TI141C</td>
<td>Basic First Aid and Life Support, 1 cr.</td>
<td>Emergency care for the injured.</td>
</tr>
<tr>
<td>TI145C</td>
<td>Advanced Auto Maintenance, 5 cr.</td>
<td>This course will expand the knowledge and skills obtained in AM114C. Students will study maintenance of additional vehicle systems and gain the ability to assist technicians. Prerequisites: AM113C, AM114C.</td>
</tr>
</tbody>
</table>
Information Technology

IT106A  Windows NT Core Technologies, 3 cr.
Installing, configuring, customizing and troubleshooting Microsoft® Windows NT in a single domain Microsoft® NT-based network. Students learn how to integrate Windows NT and Novell networks. This course also helps to prepare students to meet the certification requirements to become a Windows NT Certified Professional. For IT program, see IT116A. This course primarily covers MS certification test materials and will not necessarily meet requirements of the IT program.

IT108A  Computer Hardware/A+ Certification, 2 cr.
How to prepare and evaluate system specifications, troubleshoot minor hardware problems, configure and install hardware, manage memory, modify and use diagnostic software. For IT program, see IT110A. This course primarily covers MS certification test materials and will not necessarily meet requirements for the IT program.

IT110A  Computer Hardware/A+ Certification, 3 cr.
How to prepare and evaluate system specifications, troubleshoot minor hardware problems, configure and install hardware, manage memory, modify and use diagnostic software.

IT112A  Networking Essentials, 1 cr.
Foundational training in local area networking technology serving as a general introduction to LANs, WANs and the Internet. Topics include IRQs, network interface cards (NIC), cabling (coax, STP, UTP and fiber), ARCNET, network protocols, hubs, routers and bridges. For IT program, see IT115A. This course primarily covers MS certification test materials and will not necessarily meet requirements of the IT program.

IT115A  Networking Essentials, 4 cr.
Foundational training in local area networking technology serving as a general introduction to LANs, WANs and the Internet. Topics include IRQs, network interface cards (NIC), cabling (coax, STP, UTP and fiber), ARCNET, network protocols, hubs, routers and bridges.

IT116A  Windows NT Core Technologies, 4 cr.
Installing, configuring, customizing and troubleshooting Microsoft® Windows NT in a single domain Microsoft® NT-based network. Students learn how to integrate Windows NT and Novell networks. This course also helps to prepare students to meet the certification requirements to become a Windows NT Certified Professional.

IT117A  Windows NT Network Administration, 2 cr.
Teaches the knowledge and skills necessary to perform post-installation and day-to-day administration tasks in single domain and multiple domain Windows NT-based networks. Students create and administer user and group accounts, manage disk resources, monitor resources to track usage and disk space, and administer the MS Windows NT server and Windows NT Workstation operating systems in real-world situations. For IT program, see IT119A. This course primarily covers MS certification test materials and will not necessarily meet requirements of the IT program.

IT118A  Windows 2000 Professional, 4 cr.
Students will learn to use Windows 2000 Professional as a desktop operating system to implement, administer and troubleshoot information systems that incorporate Microsoft® Windows 2000 in a workgroup and client/server environments.

IT119A  Windows NT Network Administration, 4 cr.
Teaches the knowledge and skills necessary to perform post-installation and day-to-day administration tasks in single domain and multiple domain Windows NT-based networks. Students create and administer user and group accounts, manage disk resources, monitor resources to track usage and disk space, and administer the MS Windows NT server and Windows NT Workstation operating systems in real-world situations.

IT120A  Windows 2000 Server, 4 cr.
Students will develop the ability to implement, administer and troubleshoot information systems which incorporate Microsoft® Windows 2000 Server for medium to very large computing environments.

IT122A  Windows 2000 Networking Infrastructure, 4 cr.
Installing, monitoring, configuring and troubleshooting DNS, DHCP, remote access, network protocols, IP routing and WINS in a Windows 2000 network infrastructure. In addition, the course teaches the skills required to manage, monitor and troubleshoot network address translation and certificate services.

IT139A  Information Technology Practicum, 3 cr.
IT140A  Information Technology Practicum, 5 cr.
Supervised work experience in the information technology field.

IT203A  Introduction to TCP/IP, 3 cr.
Installing, properly configuring and testing TCP/IP. Topics include subnet addressing; implementing IP routing; dynamic host configuration protocol; IP address resolution; NetBIOS name resolution; Windows Internet Name Service; connectivity in heterogeneous environments; implementing Microsoft® SHMP service; and performance optimization and troubleshooting. For IT program, see IT204A. This course primarily covers MS certification test materials and will not necessarily meet requirements for the IT program.
Course Descriptions

IT204A Introduction to TCP/IP, 4 cr.
Installing, properly configuring and testing TCP/IP. Topics include subnet addressing; implementing IP routing; dynamic host configuration protocol; IP address resolution; NetBIOS name resolution; Windows Internet Name Service; connectivity in heterogeneous environments; implementing Microsoft® SHMP service; and performance optimization and troubleshooting.

IT206A Exchange Server Administration, 3 cr.
Designed to simulate the day-to-day activities and responsibilities of a Microsoft® Exchange Administrator, 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. For IT program, see IT208A. This course primarily covers MS certification test materials and will not necessarily meet requirements of the IT program.

IT208A Exchange Server Administration, 4 cr.
Designed to simulate the day-to-day activities and responsibilities of a Microsoft® Exchange Administrator, 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.

IT212A Designing Networking Infrastructure, 4 cr.
This course teaches the skills required to analyze the business requirements for a network infrastructure and to design a network infrastructure that meets those business requirements. Network infrastructure elements include network topology, routing, IP addressing, name resolution such as WINS and DNS, Virtual Private Networks (VPN), remote access and telephony solutions.

IT214A Internet Information Server, 3 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. For IT program, see IT216A. This course primarily covers MS certification test materials and will not necessarily meet requirements of the IT program.

IT216A Internet Information Server, 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.

IT217A Windows 2000 Active Directory, 4 cr.
This course teaches the ability to install, configure and troubleshoot the Windows 2000 Active Directory components, DNS for Active Directory and Active Directory security solutions. In addition, this course teaches the skills required to manage, monitor and optimize the desktop environment by using Group Policy.

IT219A Designing Directory Services, 4 cr.
This course instructs in the ability to analyze business requirements and design a directory service architecture. This includes unified directory services such as Active Directory and Windows NT domains; connectivity between and within systems, system components and applications; data replication such as directory replication and database replication. The course also teaches the skills required to analyze the business requirements for desktop management and designing a solution for desktop management that meets business requirements.

IT221A Designing Security, 4 cr.
Students will learn the skills required to analyze business requirements for security, and design a security solution which meets those requirements. Security issues include controlling access to resources, auditing access to resources, authentication and encryption.

IT225A System Administration for SQL, 3 cr.
Knowledge and skills required to install, configure, administer and troubleshoot Microsoft® SQL® Server client/server database management system. For IT program, see IT227A. This course primarily covers MS certification test materials and will not necessarily meet requirements of the IT program.

IT227A System Administration for SQL, 4 cr.
Students learn the knowledge and skills required to install, configure, administer and troubleshoot Microsoft® SQL® Server client/server database management system.

IT238A Enterprise Technologies, 3 cr.
Students learn to design, implement and support the Windows NT Server network operating system in a multiple domain enterprise environment. For IT program, see IT230A. This course primarily covers MS certification test materials and will not necessarily meet requirements of the IT program.

IT230A Enterprise Technologies, 4 cr.
Students learn to design, implement and support the Windows NT Server network operating system in a multiple domain enterprise environment.

IT240A Proxy Server, 4 cr.
This course teaches the ability to implement, administer and troubleshoot information systems which incorporate Microsoft® Proxy Server version 2.0. Students will learn to choose a secure access strategy for various situations, plan an Internet site or an intranet site for stand-alone servers, single-domain environments and multiple-domain environments.

IT241A SNA Server Operations and Management, 3 cr.
Skills and knowledge to identify how Microsoft® SNA server is used to meet the specific needs of an organization.
Planning, installing, configuring and managing the SNA server. For IT program, see IT243A. This course primarily covers MS certification test materials and will not necessarily meet requirements of the IT program.

**IT243A SNA Server Operations and Management, 4 cr.**
Includes the skills and knowledge needed to identify how Microsoft® SNA server is used to meet the specific needs of an organization. Planning, installing, configuring and managing the SNA server.

**IT260A Site Server, 4 cr.**
Students will learn to install and configure Microsoft® Site Server on a web site; select the appropriate components to provide the needed web site functionality; publish and deploy content; analyze the usage of a web site; and describe the features of the Customizable Starter Sites and explain how these sample sites can be used to quickly build a web site.

**Journalism**

**JR110A Newspaper Laboratory I, 2 cr.**
Provides the student with the skills and knowledge of newspaper operations, including deadline pressures, writing, photography, editing and layout.

**JR113A Introduction to Photography, 3 cr.**
Introduction to the 35mm camera: theories of light; focusing; proper exposure; depth of field and film types; composition; film processing and basic darkroom techniques.

**JR122A Newspaper Laboratory II, 2 cr.**
Continuation of JR110A.

**JR153A Beginning News Writing, 3 cr.**
Covers 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.

**JR201A Independent Study in Photography, 1 cr.**
Independent academic project related to photography.

**JR210A Independent Study in Journalism, 1 cr.**
Independent academic project related to journalism.

**JR212A Newspaper Laboratory III, 2 cr.**
Continuation of JR212A.

**JR213A Media Law and Ethics, 3 cr.**
Covers legal, ethical and business concerns surrounding the mass media, both as contemporary issues and from historical perspectives.

**JR220A Newspaper Laboratory IV, 2 cr.**
Continuation of JR 212A.

**JR234A Journalism Practicum, 2 cr.**
Practical work experience of at least 140 hours related to Journalism/Photography.

**JR236A Journalism Practicum, 5 cr.**
Practical work experience of at least 350 hours related to Journalism/Photography.

**Legal Assistant**

**LA113A Business Law, 3 cr.**
Study of the law relative to the formation of business entities; proprietorship, partnerships and corporations, as well as an introduction to contracts and the uniform commercial code.

**LA114A Introduction to Law and the Paralegal Profession, 3 cr.**
Review of the paralegal as a career and an orientation to the five main bodies of American law.

**LA122A Domestic Relations, 3 cr.**
Study of law and procedures relative to marriage, dissolution and adoption.

**LA124A Legal Research, 4 cr.**
Study of the law library and research sources using reporter systems, statutes, digests and secondary sources. The course also contains a computer-assisted research component.

**LA133A 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.

**LA210A Independent Study in Law, 3 cr.**
**LA211A Independent Study in Law II, 3 cr.**
Courses are designed to be flexible — to address a contemporary legal issue currently in the public eye. Students are required to participate in discussions, read a variety of related materials and write a position paper on a given subject. Limited to sophomore Legal Assistant students.

**LA213A Torts and Litigation, 3 cr.**
Studies the basic principles of tort law: negligence, intention torts and strict liability.

**LA214A Wills, Trusts and Estate Administration, 3 cr.**
Studies wills, trusts, probate procedures and tax aspects of estate administration.

**LA222A Legal Writing and Drafting, 2 cr.**
Detailed examination of the various types of legal documents, their content and preparation.

**LA224A Civil Procedure and Practice, 4 cr.**
Studies the process of a civil lawsuit including the preparation, commencement and trial of a civil suit.
Marine and Small Engine Technology

SM111C  Engine Principles I, 9 cr.
Basic four-cycle engine theory, construction and design. Complete disassembly and assembly of engines of modern design are performed by the student. Repair and diagnosis procedures involved in repairing these units are covered. Lecture and laboratory.

SM113C  Electrical Systems I, 5 cr.
Basic electrical theory used in the marine small engine mechanics field. Covers relationships between electricity and magnetism, types of circuits and problem solving which are common to the trade. Lecture and laboratory.

SM115C  Transmissions and Final Drives I, 3 cr.
Construction, operation, maintenance and repair of transmissions, clutches, belt drives, sprockets and chains. Lubrication and diagnosis of all units are covered. Lecture and laboratory.

SM121C  Engine Principles II, 7 cr.
Continuation of SM111C.

SM122C  Electrical Systems II, 5 cr.
Continuation of SM113C plus ignition systems, types, purpose and components and primary and secondary circuits. Lecture and laboratory.

SM123C  Transmissions and Final Drives II, 4 cr.
Continuation of SM115C.

SM131C  Engine Principles III, 4 cr.
Continuation of SM122C.

SM132C  Electrical Systems III, 3 cr.
Continuation of SM122C.

SM133C  Marine Lower Units, 2 cr.
Introduction to the construction, maintenance and repair of outboard lower units. Both mechanical and electric shift lower units are studied, with hands-on disassembly, inspection, assembly and testing of each unit. Also covered are the related components of the outboard engine. Lecture and laboratory.

Mathematics

MA001H Mathematics Refresher-Vocational, 1 cr.
Developmental studies course. An individualized course which reviews whole numbers, fractions, decimals, percents, ratio and proportion, and measurement.

MA002H Mathematics Improvement, 1 cr.
Developmental studies course. This course reviews whole numbers, prime factorization, fractions, decimals, percents, ratio and proportion, and basic algebra.

MA100A Orientation to College, 0 cr.
Introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q grading.

MA102A 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 applications, factoring, simplifying fractional expressions, radicals and quadratic equations. Does not count toward the mathematics requirement for the A.A. or A.S. degree.

MA103A Mathematics for General Education, 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.

MA108A Intermediate Algebra, 4 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 graphing calculators to enhance their understanding. Prerequisite: Appropriate mathematics assessment score. Does not count toward the mathematics requirement for the A.A. or A.S. degree.

MA112A College Algebra, 3 cr.
Operations of real and complex numbers; factoring, exponents; quadratic equations; inequalities; matrices; rational functions, logarithmic functions and graphing of functions. Prerequisite: MA108A or equivalent.

MA114A Trigonometry, 3 cr.
Trigonometric functions and their inverses, verifying identities, right triangle trigonometry, unit circles, radian measure, graphing, trig functions, solving trigonometric equations and applications of trigonometry. Prerequisite: MA108A or equivalent.

MA115A College Mathematics, 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: MA108A or equivalent.
### Course Descriptions

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA125A</td>
<td>Analytic Geometry and Calculus I, 5 cr.</td>
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</tr>
<tr>
<td></td>
<td>A general course in differential and integral calculus and its applications. Topics include limits and continuity; differentiation; applications of differentiation; integration; logarithmic, exponential and other transcendental functions; and applications of integration. Prerequisite: MA115A or equivalent.</td>
<td></td>
</tr>
<tr>
<td>MA126A</td>
<td>Analytical Geometry and Calculus II, 5 cr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuation of MA125A. Integration techniques, sequences, infinite series, conic sections, parametric equations, polar coordinates, vectors, cylindrical and spherical coordinates and vector-values functions. Prerequisite: MA125A or equivalent.</td>
<td></td>
</tr>
<tr>
<td>MA151A</td>
<td>Metric System, 1 cr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reviews skills and understanding needed in the use of the metric system. Does not count toward A.A. or A.S. degree general requirements. P/Q grading.</td>
<td></td>
</tr>
<tr>
<td>MA153A</td>
<td>Finite Mathematics, 3 cr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>MA227A</td>
<td>Analytical Geometry and Calculus III, 3 cr.</td>
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<td>Continuation of MA126A. Explores functions of several variables, partial derivatives, directional derivatives and gradients, multiple integration, vector analysis and a brief look at differential equations. Prerequisite: MA126A or equivalent.</td>
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<tr>
<td>MA233A</td>
<td>Differential Equations, 3 cr.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>MA293A</td>
<td>Statistics, 3 cr.</td>
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<tr>
<td>MA294A</td>
<td>Statistics, 4 cr.</td>
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<td>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: MA108A or 2 years of high school algebra or equivalent.</td>
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<tr>
<td>ME141C</td>
<td>Human Body in Health and Disease, 4 cr.</td>
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<td></td>
<td>Anatomical and biological processes of the following systems: structure of cells; tissue; organs; mechanism of disease; integumentary; digestive; respiratory; cardiovascular; lymphatic; hematological, skeletal, muscle. Diseases and disorders of the above systems.</td>
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<tr>
<td>ME143C</td>
<td>Human Body in Health and Disease II, 4 cr.</td>
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<td></td>
<td>Anatomical and biological processes of the following systems: nervous; endocrine; urinary; male and female reproductive; pregnancy, including labor and delivery; and sensory. Prerequisite: ME141C.</td>
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<td>ME144C</td>
<td>Medical Office Management I, 3 cr.</td>
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<td>Administrative procedures such as reception techniques, telephone skills, appointment scheduling, mail processing, office equipment operation and maintenance, and travel arrangements. Insurance forms and coding will be studied.</td>
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<tr>
<td>ME145C</td>
<td>Medical Office Management II, 3 cr.</td>
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<td></td>
<td>Covers private and public insurance types, processing and handling claims, insurance coding and legal precautions in claims processing. Includes medical records management and filing. Prerequisite: ME144C.</td>
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<tr>
<td>ME147C</td>
<td>Medical Transcription, 3 cr.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>ME149C</td>
<td>Medical Legal and Ethical Issues, 3 cr.</td>
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<td></td>
<td>Legal and ethical knowledge to make proper professional judgements. Topics include legal issues pertinent to medical and chiropractic clinics. Major bioethical and ethical issues are included along with CPR and first aid training.</td>
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<tr>
<td>ME150C</td>
<td>Medical Laboratory Procedures, 4 cr.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>ME156C</td>
<td>Pharmacology, 3 cr.</td>
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<td></td>
<td>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.</td>
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<tr>
<td>ME162C</td>
<td>Clinical Assisting I, 3 cr.</td>
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<td></td>
<td>On-the-job training to provide students with training in medical asepsis; infection control; interviewing and obtaining patient information; vital signs; vision screening; assist-</td>
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ing the physician with various physical examinations; instructing patients with physical therapy needs; and performing electrocardiograms.

ME163C 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.

ME213C Limited Radiology I, 3 cr.
Principles of physics and radiographic imaging necessary for the practice of limited radiology. Emphasis will be on the application of scientific concepts.

ME224C Limited Radiology II, 4 cr.
Anatomy and positioning for chest, extremities, spine and paranasal sinus X-rays.

Motorcycle Technology

MM111C Engine Principles, 6 cr.
Study of engine principles, operation, nomenclature, service, and overhaul with emphasis on disassembly, inspection, repair and reassembly using approved methods. Lecture and laboratory.

MM112C Electrical Systems, 4 cr.
Motorcycle electrical schematics and charging systems, testing and repair; includes tracing basic circuits and their functions. Lecture and laboratory.

MM113C Fuel Systems, 4 cr.
Motorcycle fuel systems, including fuel tanks, valves and filters with emphasis on carburetor disassembly, repair, adjustment and reassembly. Lecture and laboratory.

MM114C Ignition Systems, 2 cr.
Operation, function and identification of various types, brands and models of motorcycle ignition systems, with emphasis on adjustment and proper use of test equipment. Lecture and laboratory.

MM121C Chassis, 5 cr.
Functions and operations of frames, forks, brakes and wheels and their importance in relationship to control of motorcycles. Lecture and laboratory.

MM122C Transmissions and Clutches, 6 cr.
Clutches, transmissions and unique features in various brands of motorcycles, including proper procedures involved in diagnosis and repairing. Lecture and laboratory.

MM123C Tune-up and Testing, 4 cr.
Motorcycle tune-up and testing to obtain specific engine performance. Lecture and laboratory.

Music: Music Theory, Appreciation, History and Education

MU103A 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.

MU111A Ear Training and Sightsinging 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.

MU113A 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.

MU115A Jazz Improvisation I, 1 cr.

MU121A Ear Training and Sightsinging 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.

MU123A Music Theory II, 3 cr.
Continuation of MU113A which includes diatonic material, cadences, chord progression, inversions, chord spelling and part writing.

MU125A Jazz Improvisation II, 1 cr.
Continuation of MU115A.

MU152A High Brass Methods, 2 cr.
The pedagogy relevant to the elementary, beginning and intermediate student/musician studying the low brass instruments (trombone, baritone horn, tuba).

MU165A Class Voice, 1 cr.
A course for beginning singers or students who have not previously studied voice. Students will learn the elementary skills used in good singing.

MU185A 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.
**Course Descriptions**

**MU201A Music Theory III, 3 cr.**
Continuation of MU123A including the study of advanced triadic structure and synthetic scales. Emphasis on analysis.

**MU207A Beginning Piano Class, 1 cr.**
Instruction on piano keyboard in a classroom setting. No previous study is required for enrollment in this entry-level course. Pianos are provided for practice and performance.

**MU208A Piano Class II, 1 cr.**
Continued from Beginning Piano Class. Instruction on piano keyboard in a classroom setting. Pianos are provided for practice and performance.

**MU211A Ear Training and Sightsinging 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: MU121A.

**MU213A Jazz History and 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.

**MU221A Ear Training and Sightsinging 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: MU211.

**MU223A Music Theory IV, 3 cr.**
Continuation of MU201A.

**MU244A Jazz Combo/Improvisation II, 1 cr.**
Continuation of MU144A.

**MU252A Single Reed Methods, 2 cr.**
The pedagogy relevant to the elementary, beginning and intermediate student/musician studying the single reed instruments (clarinet and saxophone).

**MU262A Percussion Methods, 2 cr.**
The pedagogy relevant to the elementary, beginning and intermediate student/musician studying the percussion instruments (drums and mallets).

**MU291A Independent Study in Music, 1 cr.**
Independent study or a special project in music.

**Music: Performing Groups**

**MU109A Concert Choir I, 1 cr.**
MU110A Concert Choir I, 0 cr.
Provides an opportunity for talented singers to rehearse and perform choral music of many styles. There is no required audition.

**MU119A Pop Singers, 1 cr.**
MU120A Pop Singers, 0 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.

**MU130A Handbell Ringers, 0 cr.**
MU131A Handbell Ringers, 1 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.

**MU142A Jazz Band I, 1 cr.**
MU143A Jazz Band I, 0 cr.
Rehearsal and performance of jazz literature, with an annual tour, concerts and special occasion performances. Open auditions.

**MU144A Jazz Combo/Improvisation, 1 cr.**
Techniques of improvisation through rehearsal and performance of jazz literature through the jazz combo or small group ensemble.

**MU149A Pep Band I, 1 cr.**
MU150A Pep Band I, 0 cr.
An activity designed to give students the opportunity to experience one of the many facets of college life through performance at home basketball and/or volleyball games.

**MU153A Concert Band I, 1 cr.**
MU154A Concert Band I, 0 cr.
A music ensemble which studies, rehearses and performs literature for bands and wind ensembles. There are no required auditions.

**MU209A Concert Choir II, 1 cr.**
MU210A Concert Choir II, 0 cr.
Same as MU109A, MU110A.

**MU219A Jazz Singers, 1 cr.**
MU220A Jazz Singers, 0 cr.
Jazz Singers are the college vocal jazz choir. This group provides an opportunity for talented singers to rehearse and perform the close harmonies of vocal jazz repertoire. Auditions are held at the beginning of the fall and spring semesters.

**Music: Applied Music**

**MU205A Applied Saxophone I, 1 cr.**
MU214A Applied Guitar I, 1 cr.
MU217A Applied Trumpet I, 1 cr.
MU224A Applied String Bass I, 1 cr.
MU227A Applied Trombone I, 1 cr.
MU237A Applied French Horn I, 1 cr.
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.

NU132C Dimensions in Practical Nursing, 2 cr.
In this final course of the practical nursing curriculum, the total aspect of seeking, procuring and leaving a position; education after graduation; and career opportunities are covered. The responsibility of the nurse as a team and community member, interpersonal communications skills and the ethical and legal aspects of nursing are also addressed. A foundation knowledge of the services and functions of national, state and local health organizations and agencies are explored.

NU152C Foundations of Nursing, 2 cr.
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. 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. Historical, ethical and legal principles related to the nursing profession are discussed.

NU158C Foundations of Nursing Skills Laboratory, 3 cr.
Provides the beginning student the opportunity to learn and practice basic nursing principles related to meeting the daily needs of clients, especially the older adult. The nursing process is integrated with an emphasis on assessment, nursing diagnoses and nursing interventions utilizing standardized nursing language. Nursing skills included are assessment of vital signs, handwashing, dressing changes, catheterization and bed bath/bed making. In addition, the student develops safe techniques of drug administration and acquires knowledge regarding the action, effect, side effects and nursing implications of the major drug classifications.

NU159C Foundations of Nursing Clinical, 2 cr.
Provides the student the opportunity to demonstrate principles and skills learned in the classroom and lab setting. The student develops an awareness of the role of the nurse in caring for stable, noncomplex clients in long term care and acute care facilities. Communication skills, documentation and utilization of the nursing process are integral parts of the clinical component. P/Q grading.

NU163C Nursing Care Through the Lifespan Clinical I, 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 obstetric and 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 laboratory are observed as they relate to specific client conditions. P/Q grading.
NU173C Dimensions of Practical Nursing Clinical, 3 cr.
This course is designed to assist the student through the student-graduate transitional period by providing learning experiences in total patient care as a member of the nursing team. The student assists the staff nurse in planning and implementing nursing care for assigned clients. Effective communication skills, both verbal and nonverbal, are stressed. In the long term care facility, the student will assume the role of team leader and medication nurse. P/Q grading.

NU200C Transfer Student Clinical Orientation, 1 cr.
This course assists the current LPN in adjusting to the role of a student entering the ADN program. Entry level skills are assessed as students care for clients in the acute care setting. Use of the nursing process is emphasized in client care.

NU213C Adult Health Nursing II, 13 cr.
Emphasizes the role of the registered nurse in care of the adult client. Includes a comprehensive analysis of medical-surgical conditions affecting adults. Critical thinking is incorporated into study of the nursing process, nursing diagnoses and nursing intervention classifications used in caring for adults.

NU227C Nursing Intervention in Maternal and Child Health, 7 cr.
This course encompasses the childbearing process from pregnancy through birth and the postpartum period. Content reviews the normal pregnancy, stresses the high risk client and conditions within each phase of pregnancy. Cultural aspects of childbearing and material on the child bearing adolescent are integrated appropriately throughout. In addition, the assessment, nursing and medical management of the chronically ill child from infancy through adolescence are discussed.

NU228C Mental Health Nursing, 6 cr.
This course presents nursing care, which emphasizes the process of relating, to promote, restore and protect the mental health of individuals and groups. This course will explore the human experience of mentally ill clients as they interact with environmental forces including their families and health care providers. Current trends and issues related to psychiatric mental health nursing will be explored. A variety of settings will be used to provide learning experiences and the continuum of mental health treatment.

NU236C Comprehensive Nursing, 2 cr.
The student will prepare for entry level nursing practice by developing job seeking skills, examining the professional role of registered nursing and learning principles of organization and management.

NU253C Nursing Care Through the Lifespan Clinical II, 3 cr.
In the laboratory setting the student applies the principles and techniques used in assessment, parenteral therapy, medical and surgical asepsis. The clinical setting enables the student to care for acutely ill clients with medical-surgical conditions utilizing the nursing process. The student further develops skills in assessment, communication and IV therapy. During this rotation the student will care for clients in the operating room, assisting the scrub and circulating nurses in their duties. In addition, the student will do an observation experience in home health. P/Q grading.

NU262C Nursing Intervention in Maternal and Child Health Clinical, 2 cr.
This course emphasizes the instructional and supportive role of the nurse in maternal and child nursing, as well as the ability to plan comprehensive care utilizing the nursing process in an acute care setting. Students observe prenatal care and nursing care of the child in a variety of settings including, but not limited to, the University of Iowa Child Health Specialty Clinics, doctors’ offices, WIC clinics and Sioux Valley Hospital. P/Q grading.

NU273C Comprehensive Nursing Clinical, 3 cr.
The registered nurse role is explored in several settings including home health. The student will utilize the nursing process to deliver comprehensive nursing care for a group of clients as a member of a nursing care team. The experience is designed to assist the student through the student-graduate transition period. P/Q grading.

Parts Sales and Inventory Control

PT113C Parts Catalog, 4 cr.
An overview of major automotive parts systems, the reading of parts lists, catalogs, price sheets and exploded views will be covered. Identification of manufacturers and their products. Students will gain hands-on experience in cataloging parts. Lecture and laboratory.

PT123C Parts Systems, 4 cr.
This course develops skills in the operation of a parts store or automotive dealership parts department. Emphasis is on jobber catalogs, use of computer cataloging, invoice processing and parts sales. Students learn to handle purchase orders, repair requests and monthly statements. Lecture and laboratory.

PT124C Inventory Control, 4 cr.
A study of various inventory control systems used by the aftermarket industry. Emphasis is on use of a state-of-the-art computer inventory system. Students learn to check inventory, determine slow moving stock, ordering new stock, and arrangement of stock. Lecture and laboratory.

PT132C On-the-Job Training, 4 cr.

Philosophy and Religion

PH103A Introduction 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.

PH104A Ethics in America, 3 cr.
This introductory course examines contemporary ethical conflicts and provides an understanding of the language, concepts and traditions of ethics.

PH203A Great Religions of the World, 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.

Physical Education

PE101A Fundamentals of Physical Fitness, 1 cr.
Student develops an individual wellness program with emphasis on cardiovascular and muscular fitness and provides the student with periodic fitness evaluations.

PE111A Fall Baseball I, Men, 1 cr.
PE112A Fall Baseball II, Men, 1 cr.
Study of basic and advanced fundamentals.

PE117A Fundamentals of Archery, 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 and knowledge of the activity.

PE127A Fundamentals of Golf, 1 cr.
Lecture and laboratory course designed to cover the basic principles and skill techniques involved in golf.

PE131A Varsity Basketball I, Men, 1 cr.
PE132A Varsity Basketball II, Men, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate basketball.

PE137A Fundamentals of Bowling, 1 cr.
Lecture and laboratory course designed to cover the basic principles and skill techniques involved in bowling.

PE141A Varsity Golf I, 1 cr.
PE142A Varsity Golf II, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate golf.

PE147A Fundamentals of Tennis, 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.

PE151A Varsity Basketball I, Women, 1 cr.
PE152A Varsity Basketball II, Women, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate basketball.

PE157A Fundamentals of Volleyball, 1 cr.
Lecture and laboratory course designed to cover the rules, history, strategy and skill techniques of volleyball and provide students time to practice as well as test their skill and knowledge of the activity.

PE161A Varsity Softball I, Women, 1 cr.
PE162A Varsity Softball II, Women, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate softball.

PE171A Varsity Volleyball I, Women, 1 cr.
PE172A Varsity Volleyball II, Women, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate volleyball.

PE181A Fundamentals of Downhill Skiling, 1 cr.
Designed to give the student the opportunity to enjoy downhill skiing, including academic theory and laboratory activities.

PE182A Advanced Downhill Skiling, 1 cr.
Continuation of PE181A.

PE191A Fundamentals of Weight Training, 1 cr.
Lecture and laboratory course designed to cover the basic principles and skill techniques involved in weight training.

PE201A Advanced Physical Fitness, 1 cr.
Continuation of PE101A.

PE202A Introduction to Physical Education, 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.

PE203A Personal 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 the steps toward establishing a healthier lifestyle.

PE204A Varsity Baseball I, Men, 1 cr.
PE211A Varsity Baseball II, Men, 1 cr.
Study of basic and advanced fundamentals as well as participation in intercollegiate baseball.

PE212A First Aid, 3 cr.
Basic life saving techniques as outlined by the American Red Cross and CPR as outlined by the American Heart Association.
Course Descriptions

PE213A  First Aid, 3 cr.
Course designed to teach basic life saving techniques, as outlined by the American Red Cross, and CPR, as outlined by the American Heart Association.

PE222A  Sports Officiating, 2 cr.
Principles and standards, rules, mechanics and procedures for officiating competitive sports.

PE223A  Introduction to Athletic Injuries, 3 cr.
Basic recognition, prevention, care and rehabilitation of athletic injuries. Evaluation of protective devices, nutrition and conditioning are included.

PE241A  Coaching Theory and Ethics, 1 cr.
Techniques and theory of coaching interscholastic athletics.

PE251A  Human Growth and Development-Coaches, 1 cr.
Human growth and development in children and youth in relation to physical activity.

PE261A  Sports Physiology for Coaches, 1 cr.
The structure and function of the human body in relation to physical activity.

PE271A  Athletic Injury-Coaches, 2 cr.
Course provides a knowledge and understanding of the prevention, care and rehabilitation of athletic injuries.

PE291A  Intermediate Weight Training, 1 cr.
Lecture and laboratory course designed to increase knowledge, understanding and skill techniques involved in weight training. Continuation of PE191A.

PE292A  Advanced Weight Training, 1 cr.
Lecture and laboratory course designed to cover the advanced principles and skill techniques involved in weight training.

Psychology

PY100H  Success Group I, 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.

PY110H  Success Group II, 1 cr.
Continuation of PY100H.

PY113A  General 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 and social psychology as well as other areas.

PY123A  Psychology of Adjustment, 3 cr.
Designed to increase students' knowledge and experience relating to various disabled populations; adjustment to physical and/or mental disability, conflicting treatment models, impact on self, family, community and society.

PY201A  Independent Study-Psychology/Education, 1 cr.
Individualized program of study to allow the student to engage in an in-depth study of an appropriate topic.

PY213A  Social Psychology, 3 cr.
Study of various psychological approaches to social interaction. The scientific study of how the behavior of an individual is influenced and influences the actions of others in a social environment.

PY223A  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.

PY233A  Principles of Learning, 3 cr.
Survey of behavioral theory, classical, operant and vicarious learning. Studies the nature of the learning process, conditions that facilitate learning, problems of learning measurement leading to modern cognativist concepts and other variables that affect the learning process.

PY243A  Abnormal Psychology, 3 cr.

PY253A  Human Growth and Development, 3 cr.
Human growth and development from birth through adolescence.

Recreation

RE113A  Concepts of Wellness, 3 cr.
A personalized introduction to wellness. Wellness components of flexibility, muscular strength/endurance, cardiovascular activity, body composition, nutrition, weight management, stress management and applications to healthful living. Lecture and laboratory.

RE114A  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.

RE118A  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.
Course Descriptions

RE122A Recreation Fieldwork I, 2 cr.
Fieldwork is designed to give the student practical on-the-job experience and provide the student with an opportunity to plan, implement and evaluate recreational programs.

RE212A Recreation Fieldwork II, 2 cr.
Continuation of RE122A.

RE214A Program Planning and Organization, 4 cr.
Students gain an understanding of many different recreation program areas and the aspects of developing and conducting programs to meet the needs of various populations.

RE235A Recreation Practicum, 6 cr.
RE236A Recreation Practicum, 5 cr.
Advanced practical field experience.

Sales and Marketing

BF100A DECA Activities, 0 cr.
Same as BF101A.

BF101A DECA Activities, 1 cr.
Introduction to DECA and what the organization has to offer. The course will help the students gain a better understanding of Distributive Education Clubs of America.

BF102A DECA Activities, 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.

BF110A DECA Activities, 0 cr.
Same as BF102A.

BF111A 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.

BF114A 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.

BF116A On-the-job Training, 2 cr.
An 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.

BF134A 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.

BF200A DECA Activities, 0 cr.
Same as BF201A.

BF201A DECA Activities, 1 cr.
Continuation of the professional development training in DECA.

BF202A DECA Activities, 1 cr.
Continuation of BF201A with more opportunities for professional advancement.

BF210A DECA Activities, 0 cr.
Same as BF202A.

BF213A 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.

BF217A 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.

BF225A Practicum, 5 cr.
An in-depth work experience in the operational phases of the modern retail market. Assignments are tailored to the students’ 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.

Science

SC100A Orientation to College, 0 cr.
An introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q grading.

SC103A Beginning Chemistry, 3 cr.
Introduction to basic chemistry for students who have not taken high school chemistry, or who have deficient chemistry backgrounds. Does not count toward associate degree (A.A. or A.S.) science requirement.
SC105A Anatomy and Physiology, 3 cr.
An independent study course designed to give students background in the structure and functions of the human body.

SC106A Anatomy and Physiology Laboratory, 1 cr.
Laboratory for SC105A.

SC114A Biological Science Survey, 4 cr.
Introduction to all biology, ecology, physiology and biological principles. Intended for non-science majors. Lecture and laboratory.

SC114B Biological Science Survey Laboratory, 0 cr.
Laboratory section of SC114A, offered only when needed for scheduling purposes.

SC115A Biological Science Survey Lecture, 3 cr.
Introduction to all biology, ecology, physiology and biological principles. Intended for non-science majors. Lecture section of SC114A.

SC115B Biological Science Survey Laboratory, 1 cr.
Laboratory to accompany SC115A; same as laboratory for SC114A.

SC118A Introduction to Ecology and Environmental Concepts, 4 cr.
Basic ecology and environmental concepts, including population studies of the world and how they relate to environmental problems. Lecture and laboratory.

SC119A Introduction to Ecology and Environmental Concepts, 3 cr.
The lecture portion of SC118A.

SC120A Ecology and Environmental Concepts Laboratory, 1 cr.
The laboratory portion of SC118A.

SC123A Scientific Concepts, 3 cr.
An overview of major concepts from the areas of anatomy, microbiology, nutrition and physiology. Emphasis will be on integrating these concepts and presenting current understandings of each of the topical areas. Articulation course for BSN students.

SC124A 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.

SC125A Physical Science Lecture, 3 cr.
Introduction to physics and astronomy, recommended for students who have not had physics. Same as the lecture portion of SC124A.

SC125B Physical Science Laboratory, 1 cr.
Laboratory to accompany SC125A; same as the laboratory portion of SC124A.

SC131A Natural History Workshop, 1 cr.
Short-term course studying various topics in natural history.

SC133A Environmental Ecology, 3 cr.
Environmental concerns, ideas and approaches from all over the world. This course will help develop a set of intellectual tools; an understanding of the sciences involved; and ways of thinking about people and the environment that will enable students to evaluate for themselves an environmental problem.

SC134A 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.

SC134B Earth Science Laboratory, 0 cr.
Laboratory scheduled with SC134A.

SC135A Earth Science Lecture, 3 cr.
Surveys the basic concepts of chemistry, geology and meteorology. Same as the lecture portion of SC134A.

SC135B Earth Science Laboratory, 1 cr.
Laboratory to accompany SC135A; same as the laboratory portion of SC134A.

SC139A Introduction to Geology, 3 cr.
An introductory course that examines how earth’s interacting geological systems relate to the development of life. Plate tectonic theory will be studied as it explains how the earth changes.

SC139B Geology Laboratory, 1 cr.
Laboratory for SC139A. May include minerals, rocks, interpretation of topographic maps and aerial photographs.

SC140A Meteorology, 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.

SC141A Astronomy Laboratory, 1 cr.
Laboratory activities for SC143A.

SC143A Astronomy, 3 cr.
Studies the latest astronomical discoveries and astrophysical theories.

SC150A Independent Study in Science, 1 cr.
Independent study or a special project in science.
SC171A Chemistry for Nursing, 1 cr.
An introduction to basic organic chemistry used and encountered in nursing situations.

SC172A Introduction to Chemistry I Laboratory, 1 cr.
Laboratory to accompany SC173A; same as the laboratory portion of SC174A.

SC173A Introduction to Chemistry I, 3 cr.
The lecture portion of SC174A.

SC174A Introduction to 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.

SC175A Introduction to Chemistry II, 4 cr.
Continuation of SC174A. Covers kinetics and equilibrium of chemical reactions as well as acid-base theory. Hydrocarbons naming and reactions are also covered, including alcohols, carbohydrates, amines, acids, acid derivatives, lipids, amino acids, nucleic acids and proteins, DNA, RNA and metabolism. Lecture and laboratory. Prerequisite: SC174A.

SC176A Introduction to Chemistry II, 3 cr.
The lecture portion of SC175A. Prerequisite: SC174A.

SC177A Introduction to Chemistry II Laboratory, 1 cr.
Laboratory to accompany SC176A; same as the laboratory portion of SC175A.

SC183A General Physics I Lecture, 3 cr.
The lecture portion of SC184A.

SC184A General 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.

SC184B General Physics Laboratory, 0 cr.
A separately scheduled laboratory for SC184A.

SC185A General Physics II, 4 cr.
Continuation of SC184A. Thermodynamics, electricity and magnetism are covered in this semester. Lecture and laboratory. Prerequisite: SC184A.

SC185B General Physics Laboratory, 0 cr.
A separately scheduled laboratory for SC185A.

SC196A General Chemistry I, 5 cr.
The properties of matter in terms of modern chemical principles. Topics covered are measurements, stoichiometry, atomic structure, chemical reactions, periodic relationships, gas laws, solutions and equilibrium. Problem solving in each of the areas is included. Lecture and laboratory. Prerequisite: High school chemistry and mathematics.

SC197A General Chemistry II Lecture, 3 cr.
Acids and bases, oxidation reduction, kinetics and equilibrium, solubility products, nuclear chemistry thermodynamics, electrochemistry, coordination complexes, qualitative analysis and organic chemistry. Problem solving in each of the areas is included. Prerequisite: SC196A.

SC198A General Chemistry II Laboratory, 2 cr.
An optional laboratory for SC197A. Prior or concurrent registration in SC197A required.

SC201A 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.

SC220A Biology I, 4 cr.
Introduction to biology concepts with emphasis on ecology, cellular biology, reproduction and development, genetics and evolution. Lecture and laboratory.

SC220B Biology I Laboratory, 0 cr.
A separately scheduled laboratory for SC220A.

SC225A Organic Chemistry I, 5 cr.
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 science and for anyone planning to take further courses in chemistry. Lecture and laboratory. Prerequisite: SC197A and SC198A.

SC230A Biology II, 4 cr.
Introduction to biology concepts with emphasis on kingdoms, taxonomy and survey of invertebrate and vertebrate organisms; plant structures and physiology; and animal systems. Lecture and laboratory. Prerequisite: SC220A.

C230B Biology II Laboratory, 0 cr.
A separately scheduled laboratory for SC230A.

SC235A Organic Chemistry II Lecture, 3 cr.
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. Prerequisite: SC225A.
SC236A  Organic Chemistry II Laboratory, 2 cr.
A laboratory to accompany SC235A. Prior or concurrent registration in SC235A required.

SC240A  Human Anatomy and 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.

SC248A  Microbiology, 4 cr.
General microbiology designed for the science major and nursing student. Emphasis on morphology, physiology, microbial genetics, immunology, pathology, epidemiology, and laboratory techniques. Lecture and laboratory. Prerequisite: SC220A or SC271A.

SC249A  Microbiology Laboratory, 1 cr.
The laboratory-only portion of SC248A.

SC265A  Field Biology, 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.

SC270A  Human Physiology, 4 cr.
Physiology and biochemistry of the human body. Designed for the health science major. Lecture and laboratory.

SC271A  Human Anatomy, 4 cr.
Structure and function of the human body, with emphasis on structure. The basic functioning of the cell and all body systems are included. Designed for the health science major. Lecture and laboratory.

SC272A  Human Anatomy Essentials, 1 cr.
A human anatomy course for nursing students needing additional credit in this area.

SC280A  Organic Chemistry-Special, 2 cr.
Special problems in organic chemistry to cover deficiencies in a student’s organic chemistry background.

SC284A  Engineering 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 a previous course in calculus.

SC285A  Engineering Physics II, 5 cr.
Continuation of SC284A. Thermodynamics and electricity and magnetism are covered in this course. Lecture and laboratory.

SC286A  Special Projects in Physics, 2 cr.
Special problems in engineering physics to cover deficiencies in a student’s physics background.

Social Science

SS101A  Orientation to College, 0 cr.
An introduction to academic and personal information related to Iowa Lakes Community College. This information is vital for student success. P/Q Grading.

SS102A  Student Senate Leadership I, 1 cr.
Encouraging academic excellence within the realm of providing social, recreational, educational and leadership activities.

SS103A  Introduction to 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 the governments of other nations.

SS104A  Career Exploration, 2 cr.
Students learn about themselves, theories about careers, and resources available to assist in the career exploration and decision-making process.

SS109A  Prime for Life in the Workplace, 1 cr.

SS110A  Student Senate Leadership II, 1 cr.
Students are provided an opportunity to participate in the operation of the college, both academically and socially.

SS111A  Student Leadership Skills, 1 cr.
Leadership skills, peer helping skills and comprehensive information designed for students concerning alcohol use. Students will design prevention messages for presentation in their other classes.

SS112A  Peer Helper Training, 1 cr.

SS113A  Introduction to Sociology, 3 cr.
Reviews sociology as an academic discipline. Basic sociological concepts, theory and methods are examined.

SS119A  Children from High Stress Environments, 1 cr.

SS121A  Social Science Interim, 1 cr.
Supplemental enrichment course related to the Social Sciences which includes special projects. P/Q grading.

SS122A  Peer Helper Projects, 1 cr.

SS123A  Social Problems, 3 cr.
Discusses social change, social disorganization, group and individual deviation, social movements and the nature, origin and types of social problems.
SS130A Asian Studies, 3 cr.
This interdisciplinary course provides students with an understanding of the historical and geographical context of the development of Northeast and Southeast Asia.

SS143A American Government, 3 cr.
Review of basic fundamentals of American government including federalism, the political process, the presidency, the congress and the judicial system.

SS146A Western Civilization I, to 1715, 3 cr.
Surveys the origins of human civilization in the Near East, the great rise of Greece and Rome and concludes with the Enlightenment.

SS147A Western Civilization II, 1715-Present, 3 cr.
Examines an extremely dynamic phase of European and world history.

SS153A State and 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.

SS156A American History I, 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.

SS157A American History II, 1877-Present, 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.

SS163A World Regional Geography, 3 cr.
Introductory course in college geography dealing with location, interaction and interdependence of countries of the world.

SS170A The Africans, 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.

SS173A American Film Studies, 3 cr.
Explores Hollywood film making technically, artistically and culturally. Students will learn to actively and critically assess films, their styles and influences.

SS181A Rural Community Sociology, 3 cr.
A study of the forces that have shaped and continue to influence America's rural communities.

SS183A Social Science Concepts, 3 cr.
Reviews major concepts from the areas of psychology; sociology; human growth and development; composition and speech communication. Articulation course for BSN students. Emphasis will be on recent research findings and a review of pertinent topics.

SS201A Independent Study in Social Science, 1 cr.
Independent academic projects related to social science.

SS223A Marriage and Family, 3 cr.
Study of the family in cultural, cross-cultural, historical, and social context.

SS231A Independent Study in History, 1 cr.
Independent academic projects related to history.

SS233A History of American Foreign Relations, 3 cr.
Comprehensive survey of the evolution of American foreign policy from colonial times to the present day.

SS243A History of International Relations, 3 cr.
Historical study of elements of national power and the formulation of foreign policy. Examination of national, state and international politics from 1871 to the present international organization law and future prospects.

SS256A History of Iowa, 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.

SS263A Classical Heritage, 3 cr.
An introduction to music and art in the western world. The period from Classical Greece to the present is studied.

SS273A Minority Culture, 3 cr.
Survey of the contributions that various minorities have made to the development of the United States.

SS277A Cultural Anthropology, 3 cr.
Introduction to the comparative study of culture and social organization from the anthropological point of view.

SS280A Global Perspective, 3 cr.
A survey course to identify and analyze the variety and extent of global economic, political, social and cultural problems and issues.

Speech

SP101A Speech Activities I, 1 cr.
Students receive credit for participating in intercollegiate speech competition in a variety of individual speaking events.

SP103A Speech Fundamentals, 3 cr.
Development of the basic skills involved in variety of speaking situations, including oral presentations and interpersonal speaking. Emphasis is placed on organization, voice, articulation, listening, nonverbal communication, critical thinking, and methods of dealing with communication apprehension.
Course Descriptions

SP111A Speech Activities II, 1 cr.
Continuation of SP101A.

SP114A Introduction 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. This course also examines the various duties of all persons involved in theatrical productions.

SP112A Public Speaking, 2 cr.
In-depth study of the public speaker’s responsibilities in a variety of group communication settings including special occasion speeches, oral interpretation of literature, informative and persuasive speaking.

SP142A Interpersonal Communication, 2 cr.
Examines how humans communicate in one-on-one situations through personal and professional relationships.

Surgical Technology

ST111C Surgical Technology Practicum I, 1 cr.
Clinical course with emphasis on application of knowledge and skills in the lab and clinical setting. This course allows the student to begin to gain experience for functioning in the operating room as a surgical technologist. Skills of surgical technique are applied. Co-requisites: concurrent registration in ST114C and ST117C.

ST114C Surgical Techniques I, 4 cr.
A complete study of aseptic technique including principles; methods of sterilization and disinfection; procedures for scrubbing, gowning and gloving; and the means for sterilizing the operating room. The course continues with patient care, covering preoperative routine, positioning, prepping, draping, related nursing procedures; and the care needed by pediatric patients, chronic and terminal patients, and patients with special needs.

ST117C Introduction to Surgical Technology, 7 cr.
Study of professional responsibilities, operating room environment, medical terminology, fire and electrical safety, Universal Precautions and operating room safety. Basic microbiology and its relationship to healing will be covered. The many types of pharmacological agents used in surgery will be included.

ST121C Surgical Technology Practicum II, 1 cr.
Clinical course with emphasis on application of knowledge from previous and current semesters. Clinical supervision is accomplished through the use of a preceptor at a cooperating health care facility. This course applies skills learned in previous courses and helps the student gain experience to be able to function at the entry level for employment. Prerequisites: ST111C, ST114C, ST117C and concurrent registration in ST124C and ST126C.

ST124C Surgical Techniques II, 4 cr.
This course completes the study of surgical techniques, specifically supplies and equipment. Operating room furniture and equipment; instrumentation; sutures and sponges; drainage systems; counts; and a final encompassing unit on establishing a sterile field are covered. Prerequisites: ST111C, ST114C, ST117C.

ST126C 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/peripheral surgery. Prerequisites: ST111C, ST114C, ST117C.

ST131C Surgical Technology Practicum III, 8 cr.
Clinical course with continued application of knowledge and skills in the clinical setting of a cooperative health care facility. This course refines and hones the surgical technology student’s skills by gaining experience in a concentrated time frame, resulting in readiness to function at the entry level of employment. Prerequisites: ST111C, ST114C, ST117C, ST121C, ST124C, ST126C.

Travel and Tourism

TR113A Introduction to Tourism, 3 cr.
The tourism industry, reasons for travel, the economic, social and psychological impacts of tourism, basics of service for tourists and an introduction to tourist destination development.

TR116A Travel Geography, 3 cr.
World geography as it pertains to travel and tourism on the basis of economic benefits, cultural and geographic locations and their ability to attract tourism.

TR121A Directed Study Tour I, 1 cr.
Participation in a group study tour to a selected destination, noting the various aspects of the travel industry. Each student will present a written critique at the conclusion of the tour.

TR124A Reservations and Ticketing, 4 cr.
Introductory course in planning, scheduling and ticketing travel reservations for airlines, Amtrak and cruise ships. Travel resource books are reviewed and a brief orientation to international documents and travel agency customer service is included.

TR126A Tour Management, 3 cr.
This course examines the group tour industry. Topics covered include why customers take group tours, the impor-
tance of tour guides and escorts, and working with other suppliers.

**TR133A Trends in Tourism, 3 cr.**
Covers current topics in the travel and tourism industry as they continually change due to new technology and societal trends.

**TR134A Tourism Marketing, 3 cr.**
Analyzes marketing and public relations techniques used in the travel and tourism industry to promote tourism and attract visitors or customers.

**TR211A Directed Study Tour II, 1 cr.**
Participation in a group study tour to a selected destination, noting the various aspects of the travel industry. Each student will present a written critique at the conclusion of the tour.

**TR216A Computerized Reservation Systems, 4 cr.**
Hands-on experience with a system which simulates the APOLLO system. An introduction to SABRE is available by individual instruction.

**TR225A Tourism Practicum, 5 cr.**
Work in a travel or tourism organization. Students will be required to keep a log showing hours worked and job experiences. Prerequisite: Approval of the instructor.

### Welding

**WE111C Oxy-acetylene Theory, 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.

**WE112C Electrical Arc Theory, 5 Cr**
Safety factors and practices relating to welding machines, electrodes and positions used in arc welding. Lecture and laboratory.

**WE113C Blueprint Reading, 3 cr.**
Blueprint reading and layout to develop essential skills to permit use of blueprints in job-like situations.

**WE114C Structural Welding, 4 cr.**
Designed to develop techniques required to properly weld structural steel and pass the AWS certification examination. Lecture and laboratory. Prerequisites: WE111C and WE112C.

**WE115C Brazing and Soldering, 2 cr.**
Identification of metal and what filler is needed to join these materials. Prerequisites: WE111C and WE112C.

**WE121C MIG and TIG Theory, 2 cr.**
Studies the necessary fundamentals of the metallic inert gas and tungsten gas processes.

**WE122C MIG and TIG Laboratory, 3 cr.**
Studies MIG and TIG welding in correlation with the use of equipment, variables, safety and data for welding metals. Prerequisite: WE121C.

**WE123C Pipe Welding, 5 cr.**
Develops the exacting techniques required to properly weld pipe installations. Lecture and laboratory. Prerequisites: WE112C, WE121C, WE122C.

**WE124C Special Processing, 3 cr.**
Ferrous to ferrous, nonferrous to nonferrous and hardsurfacing used in the welding field today. Lecture and laboratory. Prerequisites: WE111C and WE112C.

**WE125C Production Welding, 3 cr.**
Work is done quickly, uniformly and close to tolerances. Design layout and building jigs from prints is required. Prerequisites: WE121C and WE122C.

**WE126C Pipeline Welding Qualification, 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.
Faculty & Staff

BOARD OF TRUSTEES

Jack Tatman, President, District 3, Spirit Lake
John Hand, Vice President, District 6, Emmetsburg
Ann Barry, District 4, Spencer
Lynn Kueck, District 7, Algona
Bud Kyle, District 5, Milford
Jan Lund, District 2, Estherville
Jim Miller, District 1, Ringsted

PRESIDENT’S COUNCIL

Jim Billings (1994)
President
B.A., M.A., Truman State University; Specialist, Drake University

Jane Sewell Campbell (1994)
Executive Director, Marketing
B.A., University of Northern Iowa

Judy Cook (1984)
Executive Director, Planning/Development
B.A., Augustana College (Illinois); M.A., University of Iowa

Thomas R. Herbst (1973)
Vice President of Administration
B.S., U.S. Air Force Academy; M.S., University of Wisconsin-Stout

Tammy Higgins (1996)
Executive Director of Institutional Advancement
B.A., University of Northern Iowa

Delaine Hiney (1992)
Executive Director of Plant Services
A.A., Iowa Lakes Community College; B.A., Briar Cliff College

Robert L’Heureux (1985)
Executive Director of Finance
B.A., Simpson College; M.A., University of Iowa

Ellengray Kennedy (1996)
Executive Dean
B.S., M.B.A., University of South Dakota

Clark Marshall (1986)
Executive Director, Economic Development/Continuing Education
Business management experience, 14 years

Dave Nixon (1991)
Executive Dean of Emmetsburg Campus
B.A., Briar Cliff College; M.A., Ed.D., University of South Dakota

ADDITIONAL MEMBERS COMPRISING ADMINISTRATIVE TEAM

Randy Beermink (1983)
Director, Computer Center
B.A., Northwestern College; M.A., University of Iowa

John Beneke (1991)
Director, Financial Aid (1991)
B.A., Buena Vista University

Julie Carlson (1985)
Associate Dean of Student Services
B.A., Mankato State University; M.A., University of Iowa

Merrylea Clasing (1975)
Manager, Bookstores

Brenda Colegrove (1997)
Director of Libraries
B.S., M.A., Mankato State University

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Director, Spencer Center
B.S., Iowa State University; M.A., Drake University

Judith Donahue, R.N. (1979)
Director, Nursing Education
Diploma in Nursing, Iowa Methodist School of Nursing; B.S.N., M.S.N., Drake University

Mary Faber (1995)
Director, ASPIRES
B.A., University of Northern Iowa; M.A., University of Iowa

Rod Ferguson (1987)
Manager, Buildings & Grounds

Roger Hayenga (1995)
Director, Upward Bound
B.S., Winona State University
Faculty & Staff

Trudy Kattner (1985)
Director, Algona Center
B.A., Cornell College; M.A., Antioch University

Bill Lapczenski (1983)
Director, Food Service/Wellness Center
A.A.S., Iowa Lakes Community College

Kelly McCarty (1999)
Small Business Development Center Director
B.A., University of Northern Iowa

Darin Moeller, 1994
Director, Athletics; Head Basketball Coach
B.A., University of Northern Iowa

John G. Nelson (1978)
Director, Admissions
B.A., Iowa Wesleyan College; M.S., Wright State University

Val Newhouse (1998)
Associate Dean, Emmetsburg Campus
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Ann Petersen (1980)
Director, Special Needs
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Director, Records & Registration
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Tom Weideman (1984)
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Linda Wiegman (1989)
Director, Educational Equity
B.S., University of Nebraska; M.A., University of Iowa

Theresa Zeigler (1993)
Technology Center Director
B.A., University of Northern Iowa

FACULTY AND PROFESSIONAL STAFF

Trudy Strain Ahrens (1997)
Talent Search
A.A., Iowa Lakes Community College; B.S., Iowa State University

Ron Anderson (1998)
Television System/Micro Computer Network Specialist
A.A.S., North Iowa Area Community College

Elizabeth Ankeny (1993)
Coordinator, Student Alternative Vocational Education (SAVE)
B.A., Augustana College; M.A., Morningside College

Dave Appelhons (1986)
Printing Lab Assistant
Diploma, Iowa Lakes Community College

Shirley Aure (1996)
Assistant to the Spirit Lake Center Director

Carol Ayres (1988)
Associate Professor, Music
B.A., Buena Vista University; M.Mus.Ed., University of South Dakota

Jean Baack, R.N. (1981)
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Janette Bahr (1971)
Programmer, Continuing Education
A.A., Iowa Lakes Community College

Heidee Barrett (1994)
Long-Term Health Care Coordinator, Continuing Education
A.A.S., Iowa Lakes Community College

DeeAnn Bates (1998)
Continuing Education Programmer
A.A., Iowa Lakes Community College; B.A., Buena Vista University

Lecia Berven (1998)
Instructor, Accounting Specialist
A.A., Iowa Lakes Community College; B.S., Mankato State University

Robert J. Boes (1974)
Professor, Biology and Chemistry
B.A., University of Northern Iowa; M.S., Purdue University; Ph.D., University of Iowa
Matthew Bohl (2000)  
Instructor, Marine & Small Engine and Motorcycle Technology  
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Sally Bohmer (1992)  
Lead Instructor, Laker Alternative High School, Estherville  
B.A., Millikin University; M.A., Ohio State University

Mike Bosch (1996)  
Assistant Professor, Mathematics  
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Rick Brant (1997)  
Talent Search Advisor  
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Travis Brewster (1998)  
Assistant Men’s Basketball Coach/Housing Manager  
B.A., Charleston Southern University

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Assistant Professor, Auto Collision Technology  
B.S., University of Wisconsin-Stout

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B.A., Columbia College; M.A., Augustana College (SD)

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Brian Campbell (1971-84, 1986)  
Associate Professor, Automotive Technology  
B.S., University of South Dakota at Springfield

Marvin Carlson (1989)  
Associate Professor, Agriculture  
B.S., Iowa State University

Jacque Carstens (2000)  
Counselor  
B.S., M.A., University of Iowa

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Professor, Agriculture  
B.S., M.S., Iowa State University

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ASPIRES Retention Specialist  
B.A., Buena Vista University

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Instructor, Automotive Technology  
Diploma, Lincoln Tech  
Industry experience, 10 years

Programmer, Continuing Education  
B.S., Iowa State University

Carol DeLong (1985)  
Associate Professor, Rehabilitation Studies  
B.S., Northwest Missouri State University; M.S., Mankato State University

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B.A., Morningside College; M.A., University of Denver

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Success Center Lead Instructor - Estherville  
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Marlene Donovan (1989)  
Associate Professor/Coordinator, Health Care Administration  
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Instructor/Co-Coordinator, Aviation  
A.S., Iowa Lakes Community College

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B.S., Mankato State University; M.S., Nursing, Mankato State University

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Learning Center Instructor  
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Kerry Erickson (1999)  
Instructor, Hotel Motel  
B.A., Mankato State University

Michelle Erickson (1998)  
Facilities Specialist  
B.A., Buena Vista University

Bonnie Ewoldt (1997)  
Alternative High School Instructor  
B.A., University of Northern Iowa, 1966
<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
<th>Education/Professional Background</th>
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<tbody>
<tr>
<td>Rebecca Fairchild</td>
<td>Upward Bound Advisor</td>
<td>B.A., Luther College</td>
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<tr>
<td>Steve Farnsworth</td>
<td>Instructor, Welding</td>
<td>A.A., Iowa Lakes Community College</td>
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<tr>
<td>Diane Friesner</td>
<td>Computer Operator</td>
<td>A.A., Iowa Lakes Community College</td>
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<tr>
<td>Brett Fuelberth</td>
<td>Assistant Professor, Vocal Music</td>
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