

**NORTH IOWA AREA
COMMUNITY
COLLEGE**

2001 - 2002

**General
Catalog &
Student
Handbook**

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North Iowa Area Community College
500 College Drive
Mason City, IA 50401
1-888-GO NIACC or (641)422-4245
Web Address: www.niacc.com
E-mail Address: request@niacc.cc.ia.us

General Information

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General Information

LOCATION AND HISTORY

The North Iowa Area Community College (NIACC) is located just off Highway 122, four miles east of downtown Mason City, Iowa, a community of 30,000 which serves as an active business center for northern Iowa and southern Minnesota. The community is served by the Mason City airport and a bus line.

The North Iowa Area Community College District (Area 2) was formed in 1966 in compliance with laws enacted by the 1965 Iowa Legislature, which provided for the delivery of postsecondary education in Iowa.

The NIACC Board of Directors assumed operation of Mason City Junior College, which was the first public two-year college in Iowa and one of the earliest in the country having been established in 1918 by the Mason City Independent School District.

Construction of the present campus began in 1970. A campus directory can be found in the back of this catalog.

ACCREDITATION AND APPROVAL

North Iowa Area Community College has been accredited since 1919 by the North Central Association of Colleges and Schools, Commission on Institutions of Higher Education, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602, (800)621-7440.

MISSION OF THE COLLEGE

Philosophy

North Iowa Area Community College believes that education, which has as its overriding goal the optimum development of all human potential, is the foundation of a democratic society.

Mission Statement

The mission of the North Iowa Area Community College is to enhance the quality of life for people of North Iowa through comprehensive educational opportunities, progressive partnerships, exemplary service, and responsive leadership.

INSTITUTIONAL PURPOSES

Within the human, financial, and physical resources entrusted to the North Iowa Area Community College, the institution strives to achieve the following goals:

- Enhance the human potential of students by assisting them to acquire the knowledge and tools necessary to understand and enrich their environment and contribute to their communities in a positive way. This becomes manifest through the development of general education skills and abilities.

- Ensure that all citizens of the North Iowa region, regardless of their educational and socioeconomic backgrounds, geographic placement, or needs for special assistance, have the opportunity and the necessary support to take advantage of post-secondary educational programs and other services offered by the College.
- Enable individuals to complete the first two years of a baccalaureate program and, upon successful completion, to achieve efficient and effective transfer to senior colleges.
- Ensure that individuals have opportunities to prepare themselves for employment in occupations in demand in a global society.
- Ensure that all individuals have opportunities to continue learning throughout their lifetimes.
- Promote a strong economy by engaging in activities which develop and maintain a skilled and educated workforce and which promote and support entrepreneurial activity.
- Extend the reach of College resources through progressive partnerships with agencies and entities in communities served by the College.
- Build community by promoting understanding, appreciation, cooperation, and communication among diverse individuals.
- Instill confidence and pride in all who come into contact with the College by fostering a commitment to excellence in all College endeavors.

BOARD OF DIRECTORS

Kevin Kolbet, Realtor, Osage, Board President, 1986-2001

Colin Robinson, President - First Citizens National Bank, Charles City, Board Vice President, 1997-2003

Jean Torgeson, Nurse, Mason City Clinic, Manly, 2001-2001

Terry Cobb, Vice President, Marketing and Customer Services, Team Quest Corp., Clear Lake, 1998-2003

Maury Gulbranson, Vice President & General Manager, Imperial, Inc., Hampton, 1999-2002

Rosie Hussey, Executive Director, Girl Scouts, Mason City, 1992-2001

Karen Knudtson, Realtor, Mason City, 1989-2002

David Steffens, Jr., President, Norsemen Trucking, Inc., Lake Mills, 2000-2003

Linda Upmeyer, Nurse Practitioner, Mercy Medical Center - North Iowa, Garner, 1990-2002

Sandra Gobeli, Secretary and Treasurer, North Iowa Area Community College

DEGREE REQUIREMENTS

Associate Degrees

Associate in Arts

Purposes of the degree:

1. Provide a degree goal for students who choose to follow a course of study which is specifically designed for transfer to a baccalaureate degree program.
2. Provide the essential general education, grade, and semester hour requirements for upper division status at most senior colleges and universities.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work consisting of courses whose principal design is for a baccalaureate program. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.
4. Completion of the following General Education Core with a minimum of 40 semester hours:

Communications8 s.h.

This requirement can be satisfied by baccalaureate-oriented communications or speech courses with a minimum of two courses in English composition.

Social Sciences8 s.h.

Humanities8 s.h.

Performance courses such as vocal and instrumental music may satisfy no more than four hours of this requirement.

Natural Sciences*8 s.h.

(including at least one math and at least one science course)

Distributed Requirement.....8 s.h.

(to be taken from among the four divisions above)

*It is recommended that students take a minimum of four semester hours of laboratory science.

5. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in Science

The purpose of the Associate in Science degree is to provide a degree goal for students who choose to follow a Natural Science degree program.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work consisting of courses whose principal design is for a baccalaureate program. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.
4. Completion of the following General Education Core with a minimum of 37 semester hours:
 - Communications8 s.h.
 - Social Sciences/Humanities9 s.h.
 - Natural Sciences.....20 s.h.
(must include at least one math and at least one science course)
5. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in Science - Business

The purpose of the Associate in Science - Business degree is to provide a degree goal for students who choose to follow a course of study designed to give the student the option of obtaining employment in business or transferring to a four-year institution. Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. Degree.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work consisting of courses whose principal design is for a baccalaureate program. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental

courses are not used in calculating the cumulative grade point average for graduation.

4. Completion of a minimum of 30 semester hours in business courses designated with the prefix 15.
5. Completion of the following General Education Core:
Communications8 s.h.
This requirement can be satisfied by baccalaureate-oriented communications or speech courses with a minimum of two courses in English Composition.
Social Sciences and/or Humanities9 s.h.
Natural Sciences.....3 s.h.
6. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in Science - Medical Secretary

The purpose of the degree is to provide a degree goal for students who choose to follow a course of study designed to give the student the option of obtaining employment as a Medical Secretary or transferring to a four-year institution. Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. Degree.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work consisting of courses whose principal design is for a baccalaureate program. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.
4. Completion of prescribed required two-year Medical Secretary curriculum.
5. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in Applied Science

Purposes of the degree include:

1. Provide a degree goal for students who choose to follow a course of study which is specifically designed

to lead to employment upon completion of two years of study.

2. Provide the student with an entry skill level appropriate to the career for which he/she has been preparing.
3. Provide the student with increased potential to function in society through study in the general areas of communications, human relations, and natural sciences.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of a prescribed two-year career curriculum. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours, unless specified otherwise by a program's accrediting agency.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.
5. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in General Studies

Purposes of the degree include:

1. Provide a degree goal for students who choose to follow an individualized course of study which is not specifically designed for transfer to a baccalaureate degree program.
2. Provide an attainable associate degree for students who complete career programs of less than two years duration.
3. Provide an associate degree for career education students who wish to enroll in selected courses to reach a personal career objective.
4. Provide a degree goal for students whose educational goals shift after initial commitment has been made.
5. Provide a flexible associate degree for students who attend college on a part-time or other nontraditional basis.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work designed to meet the personal or career goals of each individual student. Developmental courses

(course number has a suffix less than 100) cannot be used to meet this requirement.

2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.

Diplomas

This recognition is granted to a person who has completed at least thirty (30) semester hours of credit.

Program Diploma

Diplomas are awarded for the following curricula. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.

Accounting with Computers
Automotive Service
Building Trades
Climate Control Mechanics
General Secretary
General Machinist
Legal Secretary
Marketing and Sales
Medical Assistant
Medical Secretary
Medical Transcriptionist
Practical Nursing
Supervision & Management

General Studies Diploma

The purpose of the diploma is to provide an achievement recognition:

1. For students who may choose to follow an individualized course of study which is not specifically designed for transfer to a degree program.
2. For career education students who wish to enroll in selected courses to reach a personal career objective.
3. For students who attend college on a part-time or other nontraditional basis.

Requirements for the diploma include:

1. Completion of at least thirty (30) semester hours of career courses designed to meet the personal or career goals of each individual student.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.

3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC.

Certificates

Certificates of completion are awarded to indicate that a student has satisfactorily completed a program of instruction other than those indicated previously. Certificates are usually issued to students upon completion of a short-term program of study with a 2.00 (C) grade point average.

FACILITIES/SERVICES

The main campus in Mason City consists of contemporary, attractive facilities located around lakes in a park-like setting. The 500-acre campus provides facilities for instructional, administrative, recreational, and community activities. Up-to-date laboratories offer the latest in technological equipment. Adequate parking is available without charge for students and staff. Residence halls and apartments are situated on a site adjoining the campus to the north.

Agriculture Technology Lab

The NIACC farm lab consists of a cow/calf operation, farrow/breeding facility, pole barn, swine confinement, pasture, and no-till demonstration fields.

Athletic/Recreational Fields

Baseball, softball, football, soccer, and recreational fields are located on the east edge of the campus.

Conference Center

The Muse-Norris Conference Center, located east of the Auditorium and Fine Arts area, serves NIACC and community groups for education-related meetings and activities. A multipurpose recreational area is found on the lower level.

Entrepreneurial Training and Support

The John Pappajohn Business and Entrepreneurial Center provides entrepreneurial training and business support to aspiring entrepreneurs, small business owners, and individuals working in high-growth industries. The comprehensive programs are designed to increase successful new business starts, reduce the high failure rate of young ventures, and strengthen business growth opportunities.

For more information, call (641) 422-4111.

Student Learning Center (ISL)

The Student Learning Center (ISL), located in Beem Center, offers opportunities to all college students and potential students who wish to:

1. Improve their skills in reading, writing, math, and study techniques (for example, note-taking, test-taking, time management) either as a brush-up before enrollment or while participating in a NIACC course or testing program.

2. Gain new skills by participating in an individualized course such as high school credit.
3. Validate their skills by participating in a testing program such as GED, ICBE, CLEP.

For further information, students should contact their counselor, the Learning Center staff, or refer to the Instructional Resources section of this catalog.

Laboratories

The attractive facilities available in the Natural Science Division area are considered unusually complete for a community college. The math lab, in addition to the equipment and layout of the physical and biological science laboratory areas, provides for effective learning opportunities. General computer labs are contained within the Natural Science area.

The laboratories for career education contain the latest equipment and facilities for proper instruction in these areas.

Open computer labs in McAllister Hall and in the residence hall are available to all students to use for instructional application, checking e-mail, or web browsing. A lab attendant is on staff to assist students.

The Business Division has comprehensive computer labs with personal computers and dictation equipment. Students have access to this equipment days and evenings, Monday through Saturday.

Students also have access to word processing computers in the Humanities Division's Writer's Workbench Lab, which is housed next to the Student Learning Center (ISL) in Beem Center. While all students are free to enter, analyze, and edit their documents, students enrolled in most writing courses are encouraged to use the Writer's Workbench facilities.

Library

Conveniently located in the Clifford H. Beem Center, the NIACC Library serves the College as a vital part of the learning experience. Built in 1977, it is an attractive facility providing seating for 150 people. Conference rooms provide areas for group study. Collections include books, reference materials, and nonbook media in the forms of audiotapes, videotapes, films, filmstrips, slides, and electronic resources. The Library subscribes to state and national newspapers as well as area papers; periodical subscriptions cover a broad spectrum of subjects to meet user needs. Materials are coordinated with the curriculum, supporting the vocational and the academic. In addition, a collection of contemporary fiction is maintained. The NIACC Library is a congressionally-designated United States government depository. The Library's online catalog makes it easy to locate resources. For more information on the Library and its services, see page 13.

North Iowa Community Auditorium

A variety of opportunities are available to NIACC students through the North Iowa Community Auditorium, a modern 1167-seat facility located on the NIACC campus. Students perform regularly on stage through the NIACC vocal and instrumental music departments, as well as the theatre department. In addition to student and community shows, performances by nationally and internationally known artists are available to NIACC students, often at reduced prices.

Before the show or between classes, students may browse through the Auditorium Gallery where they will see various exhibits created by famous artists and NIACC art faculty and students.

Small Business Assistance

The Small Business Development Center offers assistance to small business owners or would-be entrepreneurs in all areas of business management, including sources of capital, loan applications, marketing strategies, and financial planning and analysis. Assistance includes counseling, training, and information. Services are either free or low cost.

The SBDC is affiliated with Iowa State University and the U.S. Small Business Administration under Agreement No. 5-7770-0016-14.

For more information, call (641) 422-4342.

Student Activity Center

Located in the heart of campus, the Student Activity Center offers a classy, comfortable atmosphere for studying, dining, lounging, and visiting with classmates and instructors. Meals and snacks may be obtained in the cafeteria at a very nominal cost between 7 a.m. - 3 p.m. and 5:30 - 8:30 p.m. Monday through Friday. Vending machines are also available.

Student Housing

The NIACC Dormitory Corporation operates a nonprofit residence hall which accommodates up to 475 single men and women on a site adjoining the campus to the north. The residence hall features a commons area, complete with dining, recreational, computer, and study facilities. NIACC student housing also includes lakeside apartments.

Tobacco-Free Campus

Because the College wishes to provide a safe and healthy environment for students and staff, the use of tobacco products is prohibited in College facilities.

Workforce Development Assistance

Iowa Workforce Development is a comprehensive system of employment and training programs. Whether you are a student, job seeker, career changer or employer, we have resources to assist you.

Students, job seekers, and career changers benefit from:

- Career exploration resources that assist you in making sound training and career decisions.
- Programs that help defray training costs.
- Job-seeking tools and information.
- Labor exchange services to connect business and job seekers.

Businesses

- Utilize labor exchange services to find quality employees.
- Gain information about tax benefits attached to specialized job seekers.
- Research labor market information to attract and retain quality employees.
- Access workplace training programs including Iowa New Jobs Training Program or the Iowa Jobs Training Program designed to help lower the cost of training employees.

There are core services available at no charge. Fees or eligibility requirements apply for some services. Iowa Workforce Development, "providing quality customer-driven services that support prosperity, productivity, and safety for Iowans."

For more information, call (641)422-1524.

NORTH IOWA AREA COMMUNITY COLLEGE FOUNDATION

The North Iowa Area Community College Foundation was incorporated in 1968 as the official fund-raising arm of the College. It is recognized by the Internal Revenue Service as a 501(c)(3) not-for-profit, tax-exempt corporation operating for the express benefit of the College. It is governed by a 19-member Board of Directors who serve in a noncompensated capacity.

The Foundation is authorized to solicit and receive gifts of cash, property, equipment and/or bequests and to purchase or lease property for the benefit of the College.

An annual report is distributed to all donors providing accountability to investors. NIACC Foundation books and records are audited annually.

OFFICE HOURS

The administrative offices of the North Iowa Area Community College are open Monday through Friday from 7:45 a.m. - 4:15 p.m.

NONDISCRIMINATION POLICY

North Iowa Area Community College is committed to the policy that all persons shall have access to its programs, facilities, and employment without discrimination based upon race, religion, color, creed, gender, national origin, marital status, age, physical or mental disability. Any person having concerns with respect to rights under Section 504 of the Rehabilitation Act of 1973, and Title IX of the Education Amendments of 1972, should call the Vice President for Student Services (students) at (641)422-4003 or the Director of Human Resources (employees) at (641)422-4211.

NOTE

This catalog is published for informational purposes and should not be construed as the basis of a contract between a student and North Iowa Area Community College. Every effort is made to provide information that is accurate at the time the catalog is prepared. However, information concerning regulations, policies, fees, curricula, courses, and other matters contained in this catalog is subject to change at any time during the period for which the catalog is in effect.

For more information about opportunities at North Iowa Area Community College, call the Admissions Office at (641)422-4245 or 1-888-GO NIACC (466-4222), ext. 4245.

Web Site: www.niacc.com

E-mail: request@niacc.cc.ia.us

Instructional Resources

DEVELOPMENTAL EDUCATION DIVISION

LEARNING SERVICES

Instructional Resources

DEVELOPMENTAL EDUCATION DIVISION

The mission of the Developmental Education Division is to provide access to education for the citizens of North Iowa and to support students' academic success regardless of their educational backgrounds.

This support includes assessment and developmentally appropriate instruction.

Assessment/Testing

- * American College Testing Program (ACT)
 - * College Level Examination Program (CLEP)
 - * Test Proctoring: External/Internal
 - * Police Dispatcher Recertification
 - * General Educational Development (GED)
 - GED Testing Site: NIACC Campus—Beem Center 103; five tests available in writing and reading skills, social studies, sciences, and mathematics.
 - Scholarship: For eligible GED candidates enrolling at NIACC each fall semester.
- Requirements of GED testing procedures/policies clarified by the chief GED examiner.

Basic Skills

Open entrance/open exit classes for adults with or without a high school diploma.

- * Adult Basic Education (ABE)
- * General Educational Development (GED): Adults study basic reading, writing, and mathematics. Adults may also prepare for the GED tests which lead to the attainment of a high school equivalency diploma. GED requirements are clarified by the chief GED examiner.

Literacy/Adult Basic Education

- * Reading instruction for adult nonreaders
- * ABE/Special Learning Needs: Persons functioning below ninth grade level, i.e., Opportunity Village, county care facilities, and sheltered workshops are taught basic academic and life skills.
- * English as a Second Language (ESL): Preparation in conversational English, reading, and writing for non-native speakers.

EXPERIENTIAL LEARNING

Cooperative Education Program

North Iowa Area Community College provides an educational program in which a student has the opportunity to blend theory and practice by combining classroom learning with planned and supervised field experience.

Cooperative Education is a concept which incorporates academic work with employment experience to provide a more meaningful and valuable total experience for the college student. The goal is to afford students the opportunity to enhance their academic knowledge, personal development, and professional preparation.

Credit is granted for the field experience in Cooperative Education. Students may earn up to 5 credits per term and apply 12 credits toward an associate degree. Appropriateness of learning objectives is an essential feature in the approval for credit process. For further information, contact the Employment and Career Services Office at 641-422-4370.

Individualized Competency-Based Education Program (ICBE)

The Individualized Competency-Based (ICBE) program is an individually tailored, student-designed program leading to an Associate Degree. The ICBE program is designed for adults who (1) have acquired college-level learning outside the college setting; (2) desire assessment of this learning for credit equivalence; and (3) may desire a flexible time schedule for completion of their educational goals.

The program is designed to meet the specialized educational needs of adults who have either (1) a clear direction or desire for designing their own educational program, or (2) want opportunities for life or career development or change, or (3) prefer or need the nontraditional options for their area of study.

The ICBE degree program is an alternative mode of education for adults who have had learning experiences from employment, volunteer work, noncollege education, in-service training, or other life experiences.

Student Learning Center (ISL)

The Student Learning Center, located in Beem Center, offers opportunities to all college students who wish to:

1. Improve the following:
 - Study skills
 - Math skills
 - Writing skills
 - Reading strategies
 - Test-taking skills
 - Note-taking skills
 - Time management skills
2. Schedule individual appointments for one-on-one tutoring.
3. Drop in for tutoring in NIACC class work or to study.
4. Study in a helping environment.

LEARNING SERVICES**Library**

The role of the NIACC Library is to support the curriculum and to provide resources and services to meet the needs of students, faculty, and area residents.

The collection contains 28,700 general volumes, 9,700 nonbook media items, and 48,000 government publications. Subscriptions include 8 national newspapers, 44 NIAD area newspapers, and 370 periodicals with ten-year holdings of most titles. Also available are files containing up-to-date pamphlets, career information, and social concerns materials.

The library is open 70 hours per week, including evenings and Saturdays. A professional staff of two full-time librarians and one part-time librarian, assisted by three full-time assistants, and six student assistants provide service for all patrons. The library staff will provide assistance at any time. Library orientation sessions are offered at the beginning of each semester to inform students of library resources, policies, and procedures. A library handbook is also available. A student ID card is required to check out materials. ID's are available in Student Services.

A word-processing computer, a typewriter, and various types of media equipment are available for use in the library. Copying services are provided at a minimal cost.

The library is connected by computer to over 20,000 libraries across the country via the OCLC interlibrary loan system. This brings the libraries of the United States to NIACC students. A number of electronic databases, including a full-text periodical database, newspapers, electronic books, and encyclopedias on the World Wide Web, can be accessed through the library's web page. Many more CD-ROM databases, including reference materials and government resources are also available. Cooperative agreements with other Iowa community colleges and area libraries provide additional sources of information.

The library continues to implement the utilization of new technologies to meet the information needs of NIACC students. The library uses an online library catalog and circulation system to provide easy access to resources. Six Internet workstations are available for using the World Wide Web, and a CD-ROM network provides access to resources via the campus network.

The Iowa Communications Network (ICN)

NIACC is proud to be a part of the ICN, a statewide two-way interactive video/audio/data network with over 700 electronic classrooms, connecting every county in the state. NIACC has four interactive television classrooms at the main campus in Mason City and one at the NIACC Charles City Center. In addition, there are ICN classrooms at nearly all area high schools. Students can participate in a variety of college classes at the remote sites, communicating with the instructor and other students via two-way video and audio.

TECHNOLOGY SERVICES

The Technology Services Division provides technology-related support to the campus in the areas of computer services, media services, and telecommunications. Technology Services staff members set up and maintain the computers in the computer labs, data networks, Internet, and computer applications. In addition, staff members support classroom presentation equipment such as overhead projectors, video projectors, large screen computer displays, and interactive television classrooms (ICN). Other production services, such as overhead transparencies, electronic publishing, video production, photography, satellite down-linking services, and Internet Web page development are also provided by the division.

Quotable Quote:

Nothing will divide this nation more than ignorance, and nothing can bring us together better than an educated population.

-John Sculley
in *The Atlantic*

Career Programs

AGRICULTURAL TECHNOLOGY

BUSINESS

HEALTH

REGIONAL HEALTH

PUBLIC SERVICE

INDUSTRIAL TECHNOLOGY

AGRICULTURAL TECHNOLOGY

*Larry Eichmeier, Division Head
(641) 422-4225*

Program Options for Students Enrolled in Agricultural Technology at NIACC

Associate in Applied Science Degree

Agricultural Operations Management

Agricultural Sales & Service

Agricultural Marketing & Finance

E-Agribusiness

Students completing the five-term Agricultural Operations & Management degree program or Agricultural Sales & Service degree program may elect to have a livestock production specialist or crop production specialist designation attached to their degree if they have specialized that course of study with 10 hours of approved elective course work in livestock or crop production. *Approval granted upon joint Ag staff acceptance of the Agricultural Technology Degree curriculum plan.*

Dual Degree Iowa State University Transfer Program:

NIACC's A.A.S. degree programs - Ag Operations & Management, Ag Sales & Service, or Ag Marketing & Finance (modified curriculum articulated to ISU College of Agriculture in):

Ag Studies / Ag Education

Ag Business

A.G.S. Degree: Associate in General Studies

Diploma: Agricultural Technology

Students may receive an Agricultural Technology diploma by completing 32 semester hours of approved course work. The diploma may carry an agricultural specialty designation in crop production, animal science, or Ag business management. (This is contingent upon completion of 22 hours of Ag curriculum core courses and 10 approved elective credits related to the area of specialty.) *Approval granted upon joint Ag staff and student acceptance of a curriculum plan.*

NIACC's A.A. or A.S. Degree

Ag Transfer

The Agricultural Technology Division at NIACC recognizes that new and evolving technologies, along with improved agricultural business methods and new farming systems have a significant impact on how agricultural producers, service providers, processors, and manufacturers do business. As we prepare students for the challenges of the twenty-first century, we have developed a comprehensive curriculum that addresses the needs of students entering the agricultural job market regarding technology adoption, profitable production systems, and sound business management. The agricultural curriculum for all three degree programs provides a combination of general and technical education core classes emphasizing science, technology, communications, business, and computer skills. You may select any one of the four specific technology areas—operations & management, sales & service, marketing & finance, e-agribusiness, and be assured that quality student service continues from recruitment through job placement and lifelong learning.

NIACC Farm Lab

The NIACC Farm Lab's primary mission is to transfer information assimilated from agricultural demonstration projects conducted with industry, institutional partners, and students. The NIACC Farm Lab plans and conducts demonstrations and educational programs that exhibit systems which efficiently manage agricultural resources, enhance rural profitability, protect environments, and demonstrate new and promising technologies.

During President Bill Clinton's visit to North Iowa Area Community College, he praised NIACC's agricultural programs "...technology and information...are transforming everything, including agriculture..." "I just came from a demonstration...of a computer program using satellite information that tells farmers the difference in their soil composition, their average yields, and gives them all kinds of information...they never could have gotten before. That is how far we have come..." The President praised NIACC's role as a community college educating students and providing information to the community by saying: "North Iowa Area Community College ...is a symbol for what I think we ought to be doing in America." "NIACC is:...community-based, nonbureaucratic, sensitive to the needs of its customers...a place where everybody can come...changing all the time as the economy changes and as the needs of the community and students change...a community institution that will take not only the student, but the community, into the future."

More than 300 acres of crop land, plus livestock production facilities, are dedicated to the NIACC Farm Lab for student education. These resources are being utilized to demonstrate advanced cropping systems, agricultural technologies, and livestock production. The project is made possible through industry partnerships.

More than 20 agricultural corporations are partners with NIACC providing opportunities for NIACC's agricultural technology students to be directly involved in the experiments and demonstrations. Agricultural technology students are the beneficiaries of these partnerships which bring cutting edge technology, new information, and job opportunities.

Educational focus areas include: no-till farming systems, GPS/GIS, site specific farming technology, transgenic crop demonstrations, specialty crops utilization, remote sensing technology, manure management, swine reproduction and artificial insemination technology, swine and beef genetic evaluation, livestock nutrition studies, beef cattle embryo transfer, and electronic livestock management technologies.

NIACC has facilitated learning opportunities for students interested in animal science by establishing the Swine A.I. Center. The center houses ten boars which will be used to collect, process, and market superior boar semen to area swine producers. Students will be trained to use the latest techniques and equipment available to the industry.

Agricultural technology at NIACC begins with one year of general and technical education core classes emphasizing science, communication, and business. You may then select one of the many program and specialty options leading to graduation, transfer, diploma, or work.

Important components to your education are two, eight-week employment experiences built into the curriculum. These experiences allow students to earn and learn; the work experience is invaluable in securing employment following graduation.

AN EDUCATION PARTNERSHIP

NIACC and Iowa State University's Department of Agricultural Education/Ag Studies and Agricultural Business have teamed up to design a unique program in agriculture. The first two years of the program can be taken at NIACC, and the final two years are completed at Iowa State University. Students following the dual degree program should be aware of curriculum modifications outlined in this catalog. Students completing the NIACC program are awarded an associate in applied science degree in Agricultural Operations. Those continuing on to complete the two-year program at ISU will receive a bachelor of science degree in agricultural studies or Ag business.

Note: Iowa State University College of Agriculture students must certify English proficient by obtaining a C or better in written and verbal communication courses.

Students completing the prescribed courses will fulfill the College of Agriculture intensive requirements in ethics, problem solving, communication, and environment.

Similar partnerships can be arranged with other colleges or Iowa State University departments as determined by individual needs.

Program Requirements

Entrance

Due to the highly technical nature of these programs and NIACC's commitment to giving students the best possible opportunity for success, you will be scheduled for advisement sessions to discuss your career plans, educational background, transcripts, test scores, life experiences, and motivation which will aid us in designing a positive educational experience for you. Prior to first-time class registration, students desiring unconditional admission to the Agricultural Technology Program will be assessed for math, science, reading, and writing competency by one or more of the following:

1. ACT
2. NIACC assessment using (COMPASS) tests for basic education skills OR
3. Equivalent Ag Division Exam
4. Acceptance into an honors program of study

Students who are unable to demonstrate general education competencies in math, science, reading, or writing areas will be required to develop an educational enhancement plan and may want to consider the option of additional course work in the area of deficiency, prior to graduation.

Graduation

During the semester applying for graduation, students will:

1. Be assessed for minimum general education competency by completing the General Education (college English, math, computer, communications, and science) Proficiency Exam or approved alternative evaluation.
2. Demonstrate agricultural skill proficiencies by completing an Agricultural Technology exit exam consisting of oral and written components.
OR
Submit a capstone project.

Agricultural Operations Management

The Agricultural Operations Management curriculum provides for the study of agriculture with emphasis on crop, soil, and animal sciences supported with a strong basis of economic, management, and human relations skills. The program is designed to provide future farmers, farm managers, and production career students the basic and technical training necessary for success. The program's graduates receive an associate in applied science degree. Successful graduates can find job opportunities in the following occupational areas:

- * Crop technology
- * Livestock
- * Grain marketing
- * Crop scouting
- * Pesticide applications
- * Livestock marketing
- * Ag technology
- * Farm operations
- * Custom feeding
- * Custom producing
- * Farm management
- * Diversified Ag operations

SUGGESTED SCHEDULE

This is a possible sequence of courses. A list of course corequisites and prerequisites will be prepared to allow the student to determine their own sequence of courses to complete the program.

First Term - Fall

30:101 Communication Skills I.....	4 s.h.
70:112 Animal Science I.....	3 s.h.
90:182 Computer Applications for Ag.....	3 s.h.
90:186 Soil Science.....	3 s.h.
90:264 Intro to Farm Operations	3 s.h.
	16 s.h.

Second Term - Spring

70:212 Animal Science II.....	3 s.h.
90:160 Crop Science I.....	3 s.h.
90:183 Ag Economics	3 s.h.
92:151 Ag Business Accounting.....	3 s.h.
General Ed. Elective.....	3 s.h.
	15 s.h.

Third Term - Summer

90:161 Crop Science II.....	3 s.h.
90:267 Precision Ag Technology.....	2 s.h.
92:260 Advanced Computer Applications	2 s.h.
	7 s.h.

Fourth Term - Fall

89:100 Cooperative Work Experience.....	4 s.h.
89:150 Employment Strategies	1 s.h.
90:185 Commodity Marketing	2 s.h.
Math Elective	minimum of 2 s.h.
Approved Ag Electives	6 s.h.
	15 s.h.

Fifth Term - Spring

89:100 Cooperative Work Experience.....	4 s.h.
90:285 Ag Finance Management	2 s.h.
92:272 Employment Relations & Business Decisions.....	2 s.h.
92:273 Equipment Maintenance and Management	2 s.h.
Approved Ag Electives	4 s.h.
	14 s.h.
Total Hours	67 s.h.

Agricultural Sales and Service

The Agricultural Sales and Service curriculum is designed to prepare individuals who seek employment in a business or industry providing supplies and/or services for agriculture. It provides a sound agricultural foundation and develops strengths in the areas of salesmanship, business management, human relations skills, and information management. The program leads to an associate in applied science degree. Successful graduates can find job opportunities in the following occupational areas:

- * Livestock
- * IPM crop scouting
- * Grain marketing
- * Seed sales
- * Feed sales
- * Equipment sales
- * Fertilizer sales
- * Site specific specialist
- * Crop technology application
- * Grain inspection
- * Co-op operations
- * Commission buying
- * Animal health supply
- * Meat inspector
- * Business management
- * Grain processing
- * Chemical sales

SUGGESTED SCHEDULE

This is a possible sequence of courses. A list of course corequisites and prerequisites will be prepared to allow the students to determine their own sequence of courses to complete the program.

First Term - Fall

30:101 Communication Skills I	4 s.h.
70:112 Animal Science I	3 s.h.
90:170 Intro to Ag Business	3 s.h.
90:182 Computer Applications for Ag	3 s.h.
90:186 Soil Science	3 s.h.
	16 s.h.

Second Term - Spring

70:212 Animal Science II	3 s.h.
90:160 Crop Science I	3 s.h.
90:183 Ag Economics	3 s.h.
92:151 Ag Business Accounting	3 s.h.
General Ed. Electives	3 s.h.
	15 s.h.

Third Term - Summer

90:161 Crop Science II	3 s.h.
90:267 Precision Ag Technologies	2 s.h.
92:260 Advanced Computer Applications	2 s.h.
	7 s.h.

Fourth Term - Fall

89:100 Cooperative Work Experience	4 s.h.
89:150 Employment Strategies	1 s.h.
90:185 Commodity Marketing	2 s.h.
Math Elective	minimum of 2 s.h.
Approved Ag Electives	6 s.h.
	15 s.h.

Fifth Term - Spring

89:100 Cooperative Work Experience	4 s.h.
90:189 Salesmanship/Advertising	2 s.h.
90:285 Ag Finance Management	2 s.h.
92:272 Employment Relations & Business Decisions	2 s.h.
Approved Ag Electives	4 s.h.
	14 s.h.
Total Hours	67 s.h.

Agricultural Marketing and Finance

The Agricultural Marketing and Finance curriculum provides for the study of agriculture with emphasis on business management, agricultural marketing, finance economics, information management, and human relations skills. It is supported with a strong basic agriculture technology core of instruction. Successful graduates will receive an associate in applied science degree and may have the option of continuing their education at a four-year institution or entering the following occupational areas:

- * Stock market
- * Marketing management
- * Finance management
- * Co-op marketing
- * Farm management
- * Real estate
- * Co-op accounting
- * Commodities marketing
- * Ag business mgt
- * Information management
- * Food sales
- * Feed sales
- * Advertising sales
- * Inventory control
- * Distribution
- * Ag communications
- * Ag office supervision
- * Commodity purchasing

SUGGESTED SCHEDULE

This is a possible sequence of courses. A list of course corequisites and prerequisites will be prepared to allow the student to determine their own sequence of courses to complete the program.

First Term - Fall

30:101 Communication Skills I	4 s.h.
70:112 Animal Science I.....	3 s.h.
90:170 Intro to Ag Business	3 s.h.
90:182 Computer Applications for Ag.....	3 s.h.
90:186 Soil Science.....	3 s.h.
	16 s.h.

Second Term - Spring

15:150 Accounting Principles I	3 s.h.
30:102 Communication Skills II	4 s.h.
70:212 Animal Science II.....	3 s.h.
90:160 Crop Science I.....	3 s.h.
90:183 Ag Economics	3 s.h.
	16 s.h.

Third Term - Summer

90:161 Crop Science II.....	3 s.h.
90:267 Precision Ag Technologies.....	2 s.h.
92:260 Advanced Computer Applications	2 s.h.
	7 s.h.

Fourth Term - Fall

15:120 Business Law I	3 s.h.
15:151 Accounting Principles II	3 s.h.
80:134 Microeconomics	3 s.h.
89:150 Employment Strategies	1 s.h.
90:185 Commodity Marketing	2 s.h.
Ag Electives.....	2 s.h.
	14 s.h.

Fifth Term - Spring

89:100 Cooperative Work Experience.....	4 s.h.
90:285 Ag Finance Management	2 s.h.
92:263 Ag Futures & Options	2 s.h.
92:272 Employment Relations & Business Decisions.....	2 s.h.
Ag Electives.....	4 s.h.
	14 s.h.
Total Hours	67 s.h.

E-Agribusiness

Internet access, e-commerce and information technologies are revolutionizing the landscape of agribusiness and production agriculture. The E-Agribusiness curriculum is designed to prepare individuals who desire to utilize e-commerce technology to conduct business. The program provides a sound foundation in agriculture, business, and information technology, and develops strengths in the areas of communication, computer applications, business management, Internet function, and entrepreneurship. Completion of the program results in the award of associate in applied science degree. Successful graduates can find job opportunities in the following occupational areas:

- * Ag sales/procurement
- * Ag communication
- * Data management
- * Market development
- * Internet management
- * Ag business management
- * Web page design
- * E-Commerce
- * Co-op operations
- * Networking
- * GIS applications

ENTRANCE REQUIREMENTS

1. Completion of Algebra II in high school with a "C" or better, or
2. College Intermediate Algebra or equivalent with a "C" or better, or
3. COMPASS Algebra test with a score of 76-100
4. Students must demonstrate computer literacy by completing 1 year of high school computer courses, or
5. Be currently enrolled in Computer Applications for Ag (90:182) or its equivalent.

COURSE REQUIREMENTS

Students have considerable flexibility to select courses which will structure the program for their personal career goals.

General Education:

30:101	Communication Skills	4 s.h.
	Electives	8 s.h.

Agriculture Technology:

89:100	Coop Work Experience	4 s.h.
90:170	Intro to Ag Business	3 s.h.
90:182	Computer Applications	3 s.h.
92:272	Employment Relations	2 s.h.
	Ag Electives	14 s.h.

E-Commerce Requirements:

15:156	Networking I	4 s.h.
15:169	Media Experience	3 s.h.
15:186	Internet Programming I	3 s.h.
15:191	Intro to E-Commerce	3 s.h.
15:196	Structure & Design	3 s.h.
15:197	Internet Law	3 s.h.
	E-Commerce Elective	3 s.h.

Free Electives:

Elective Courses	9 s.h.
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Total Hours

69 s.h.

SUGGESTED SCHEDULE

This is a possible sequence of courses. A list of course corequisites and prerequisites will be prepared to allow students to determine their own sequence of courses to complete the program.

First Term - Fall

15:169	Media Experience	3 s.h.
30:101	Communication Skills I	4 s.h.
90:170	Intro to Ag Business	3 s.h.
90:182	Computer Applications	3 s.h.
	Ag Elective	3 s.h.
	Total	16 s.h.

Second Term - Spring

15:196	Structure & Design	3 s.h.
	General Education Elective	3-4 s.h.
	Ag Electives	3 s.h.
	Free Electives	6 s.h.
	Total	15-16 s.h.

Third Term - Summer

15:186	Internet Programming I	3 s.h.
	General Education Elective	3 s.h.
	Total	6 s.h.

Fourth Term - Fall

15:156	Networking I	4 s.h.
15:191	Intro to E-Commerce	3 s.h.
	General Education Elective	3-4 s.h.
	Ag Electives	3-4 s.h.
	Free Electives	3 s.h.
	Total	16-18 s.h.

Fifth Term - Spring

15:197	Internet Law	3 s.h.
89:100	Coop Work Experience	4 s.h.
92:272	Employment Relations and Business Decisions	2 s.h.
	E-Commerce Elective	3 s.h.
	Ag Electives	6 s.h.
	Total	18 s.h.
	Total Hours	71-74 s.h.

Agricultural Technology Electives

If electives are required for your Ag studies, counselors and Ag instructors will help you select courses from the following course listing which will help focus your specialty study:

AG ELECTIVES

- 15:120 Business Law I
- 15:151 Accounting Principles II
- 90:169 Swine Production
- 90:171 Animal Nutrition
- 90:189 Salesmanship/Advertising and Retailing
- 90:264 Introduction to Farm Operations
- 90:282 Soils/Crop Management
- 90:293 Beef Cattle Production
- 92:166 Animal Health
- 92:168 Crop Production Lab
- 92:176 Welding
- 92:189 Ag Real Estate Evaluation
- 92:261 Site-Specific Crop Management
- 92:262 Swine A.I. Center Management
- 92:263 Agriculture Futures and Futures Options
- 92:264 Horse Essentials/Equine Essentials/Horse Care and Management
- 92:270 Livestock Production Lab I
- 92:271 Livestock Production Lab II
- 92:273 Equipment Maintenance and Management

Course Descriptions -

15:120 Business Law I (3 s.h.) Prerequisite: None. Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:151 Accounting Principles II (3 s.h.) Prerequisite: 15:150, Accounting Principles I, or equivalent. Course covers Statement of Cash Flows, financial statement analysis, job order and process cost systems, cost behavior, budgeting, standard costing, differential analysis and product pricing, capital investment analysis, activity-based costing, and just-in-time manufacturing. Emphasis is on management's use of accounting information. (45-0)

15:156 Networking I (4 s.h.) This course provides an overview of networking, including such topics as networking advantages, OSI layers, addressing and routing protocols, and LAN design, topologies, and cabling. (60-0)

15:169 Media Experience (3 s.h.) Prerequisite: 15:140, Introduction to Computers. This course covers comprehensively the latest version of HTML. Students will learn good coding practices and be introduced to web development tools and FTP programs. Students will also be introduced to SSI (ServerSide Includes), CSS (Cascading Style Sheets), image management, browser helper applications, and basic JavaScript. (30-30)

15:186 Internet Programming I (3 s.h.) Prerequisite: 15:169, Media Experience and 15:196, Structure and Design. This course will teach the fundamentals of client-side web scripting with JavaScript. Students will learn about browser-related object models and their associated properties, events, and methods. Students will work with these models to create documents on the fly, create pop-up documents, manage images, manage framesets, create roll-overs, enable and validate form elements, manage cookies, create and maintain basic databases, define and enable custom objects, and create various web-related tools. (30-30)

15:191 Introduction to E-Commerce (3 s.h.) Prerequisite: 15:140, Introduction to Computers. This course provides students with foundational skills and general information about electronic business solutions on the World Wide Web. Topics will include features of Internet marketing, sales, computer graphics, and network security. Students will also be introduced to Internet-related programming concepts and tools used to create web-based solutions. (30-30)

15:196 Structure and Design (3 s.h.) A fundamental requirement for people in the Information Technology field is the ability to organize a solution to a problem. This, in and of itself, is a difficult task. Often, however, this skill takes a backseat to learning code or is lost in the complexity of the task. Structure and Design concentrates on the process of developing a logical algorithmic solution to a problem. (45-0)

15:197 Internet Law (3 s.h.) Students will learn and examine legal issues associated with e-commerce, including but limited to, intellectual property protection, rights of privacy, content control, antitrust, and problems of jurisdiction. (45-0)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on

language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

70:112 Animal Science I (3 s.h.) This course is designed to provide a general overview of the livestock industry. The student will develop an understanding of and will be able to apply the basic principles of animal selection, breeding, genetics, feeding, health, and husbandry practices. Students will have the opportunity to practice husbandry skills at the NIACC Teaching Farm. (45-15)

70:212 Animal Science II (3 s.h.) Advanced principles of animal management, livestock facilities, feed and nutrition fundamentals, handling systems, breeding systems, and current production trends with emphasis in swine and beef production. (45-0)

80:134 Microeconomics (3 s.h.) Prerequisite: 80:133, Macroeconomics. Requires knowledge of basic high school algebra or its equivalent. Analysis of individual consumer and firm behavior, theories of production and consumption, pricing and the market system, perfect and imperfect competition, business and labor regulation, market structure, international trade and finance, and current economic problems. (45-0)

89:100 D Cooperative Work Experience (4 s.h.) Practical training on the job under the cooperative supervision of the College and work supervisor. (15-225)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:160 Crop Science I (3 s.h.) Crop plant anatomy, physiology, classification, and ID. Principles of plant protection technology in crop production. Pest classification and ID. Integrated pest management basics. Agricultural chemicals and supplies—their properties and adaptation to agriculture. Pesticide application equipment and procedures. (38-15)

90:161 Crop Science II (3 s.h.) Basic concepts and principles of plant-soil-climate relationships. Management principles necessary for successful crop production with major emphasis on corn, soybeans, small grains, and legume crops common to North Iowa agriculture. (38-15)

90:168 Ag Math (2 s.h.) A review of basic arithmetic, with a brief introduction to algebra. Problems use current and realistic agricultural situations which could be encountered by those engaged in production agriculture or employed in agriculturally related occupations and industries. (30-0)

90:169 Swine Production (2 s.h.) Advanced principles of swine production and management. Students will have the opportunity to apply skills learned in the classroom to the swine operation at the NIACC Farm Lab.

Areas of instructional emphasis include reproduction, nutrition, health, and facilities. (30-0)

90:170 Introduction to Agricultural Business (3 s.h.) Basic economic concepts, principles, and practices reflected in agriculture. An overview of the major components of an agricultural business organization and the economic fundamentals involved in organizing, operating, and managing an agricultural business. (45-0)

90:171 Animal Nutrition (2 s.h.) Fundamentals of nutrition that deal with monogastric and ruminant animals. Essential nutrient requirements. Sources, composition, and function of feedstuffs. Ration formulation and feeding recommendations. (30-0)

90:182 Computer Applications for Agriculture (3 s.h.) Computerized record keeping with spreadsheet applications for cost accounting and business analysis. Review of operating areas of business, profits and losses, efficiency evaluation, decision making, and data base utilization. Use of computer program simulators for Ag businesses. (30-30)

90:183 Agricultural Economics (3 s.h.) Principles of production, supply, and demand are applied to economic problems of agriculture and agriculturally related industries to provide beginning students in agriculture with a systematic introduction to the basic concepts and issues in economics as they relate to a major segment of the U.S. Economy—the food and fiber industry. (45-0)

90:185 Commodity Marketing (2 s.h.) Elements of producer marketing of major Midwest crops with emphasis on formulating marketing goals and plans. Use of market information in forecasting commodity prices. Commodity futures and options markets, speculation, hedging, and risk management. (30-0)

90:186 Soil Science (3 s.h.) Introduction to the physical, chemical, and biological properties of soils with an emphasis on the functions of the soil as a medium to support plant life. A review of the sources and functions of major and minor plant elements, fertilizers and their properties, soil acidity, liming materials, and soil conservation. (38-15)

90:189 Salesmanship/Advertising and Retailing (2 s.h.) Technique of selling and advertising of agricultural goods and services. Sales presentations and advertising setups of agricultural goods and services will serve as a basis for this course. (30-0)

90:264 Introduction to Farm Operations (3 s.h.) The course is a unique experience in class work at NIACC. As a class, you will be required to make decisions and carry out the decisions concerning the management of the NIACC Farm Lab. Emphasis is placed upon sound production management, effective decision making, work responsibility, and development of working relations. Students will complete tasks and projects determined by the group. (10-90)

90:267 Precision Ag Technology Systems (2 s.h.)

Prerequisite: Intro to Computers or Ag Computer Applications or demonstrated proficiency with computers. Microcomputer technology applications in agriculture with global positioning systems, geological information systems, mapping systems, graphics interface, field sensing, and equipment control related to site specific farming applications. Electronics/computers applied to practical problems in modern agricultural systems to sense, monitor, and control various processes in agronomic and animal environments. Utilization of GPS and GIS systems to analyze, manipulate, and manage Ag resources and related problems. Evaluating and using information systems and electronic communications for business profit. (15-30)

90:282 Soil and Crop Management (2 s.h.) A course integrating soil and crop fundamentals into profitable crop production systems. (30-0)

90:285 Agricultural Finance Management (2 s.h.) Financial requirements of individual farms and farm cooperative organizations. The administration and policies of lending institutions and farm credit. (30-0)

90:293 Beef Cattle Production (2 s.h.) This course is designed to help students identify the primary biological principles that contribute to raising productive beef cattle, to integrate biological and economic principles that comprise effective management decisions needed to produce profitable cattle, and to enhance the understanding and communication between all segments of the beef industry. The course material identifies the primary management principles and practices needed by commercial and seed stock producers to raise productive and profitable cattle that can meet the specifications needed by the beef industry. (30-0)

91:101 Career Math I (4 s.h.) This course is intended to provide the student with mathematics topics and applications having specific emphasis to Agriculture, Automotive, Building Trades, Climate Control Technology, General Machinist, and Tool & Die Technology. Topics include basic mathematical operations, formulas, and multi-dimensional measurement and calculation. (60-0)

92:151 Ag Business Accounting I (3 s.h.) Principles of debit, credit, the recording of data in various types of journals, posting of the ledgers, the worksheet, financial statements and their interpretation, analysis, adjusting, and closing the books at the end of the fiscal period. (45-0)

92:166 Animal Health (2 s.h.) A basic overview of animal health principles and practices. This course should enable students to identify major diseases of livestock and prescribe care and treatment. The course includes a review of animal insects and parasites. The course allows students to develop strategies for disease prevention. (30-0)

92:168 A or B Crop Production & Lab (1 or 2 s.h.) (0-30) or (0-60) Problem-solving approach to crop management. Principles and practices of agricultural science are used in the discussion of management problems and operations related to crop production at

the NIACC Farm Lab. Students will participate in the management and operations of the NIACC Farm Lab. Field trips and guest speakers. (0-30) or (0-60)

92:176 Welding (2 s.h.) An introductory course teaching basic skills in the areas of shielded metal arc welding, gas metal arc welding, and oxyacetylene welding, cutting and brazing. The basic fundamentals of each process are covered. Safe welding practices are taught. The course provides skill application in all positions, with single and multipass welds with backing strips. (15-30)

92:189 Ag Real Estate Evaluation (2 s.h.) Concepts of appraisal and pricing of real estate, along with development, growth, and value of real estate. Methods of acquiring and financing real estate and estate planning. (30-0)

92:260 Advanced Computer Applications (2 s.h.) Prerequisite: 90:182, Computer Applications for Agriculture; 90:186, Soil Science; and 70:112, Animal Science I; or with instructor approval. An advanced course that allows the student to apply the fundamentals of computers, accounting, crops, and livestock. Intended to enhance the foundations of early knowledge, in each area, with the ability to make more efficient, effective decisions. (30-0)

92:261 Site-Specific Crop Management (2 s.h.) The use of advanced technologies for crop production. (30-0)

92:262 Swine A.I. Center Management (1-3 s.h.) Students will be responsible for the operation and management of the Swine A.I. Center. During the period of instruction students will develop skills associated with the artificial insemination of swine. This hands-on experience utilizes the NIACC's industry-leading swine lab facility which includes housing of gilts, sows and boars; bright and easily accessible training areas, a fully equipped laboratory for semen processing, evaluation, extension, packaging, and storage. The course emphasizes boar management, training, reproductive physiology, semen collection, handling and processing; sow reproductive physiology, semen evaluation and packaging, artificial insemination techniques, semen marketing, and business management. (15-30, 30-60, or 45-90)

92:263 Agriculture Futures and Futures Options (2 s.h.) Prerequisite/Corequisite: Commodity Marketing. Advanced commodity marketing concepts, principles, and terminology. (30-0)

92:264 Horse Essentials/Equine Essentials/Horse Care and Management (2 s.h.) General concepts of breed type and identification; the selection process; nutrition requirements; the reproduction cycle; the importance of genetics; general health; and management requirements will build a strong background for those interested in owning a horse of their own or pursuing a career in equine management. (30-0)

92:270 Livestock Production Lab I (1 or 2 s.h.) Students will develop livestock husbandry skills associated with profitable beef and swine production. This hands-on experience emphasizes production practices that increase reproductive efficiency, insure herd health, increase pounds of market production, provide proper nutrition, and assure high market value. Students will assist in the selection, breeding, parturition, processing, feeding, fitting, and marketing of hogs and cattle. Students will evaluate, modify, and manage livestock facilities for maximum production efficiency. (0-30 or 60)

92:271 Livestock Production Lab II (1 or 2 s.h.) Students will develop livestock husbandry skills associated with profitable beef and swine production. This hands-on experience emphasizes production practices that increase reproductive efficiency, insure herd health, increase pounds of market production, provide proper nutrition, and assure high market value. Students will assist in the selection, breeding, parturition, processing, feeding, fitting, and marketing of hogs and cattle. Students will evaluate, modify, and manage livestock facilities for maximum production efficiency. (0-30 or 60)

92:272 Employment Relations and Business Decisions (2 s.h.) Provides students with an opportunity to explore management through a subordinate and a supervisory learning experience. The course emphasizes the role of management in today's agribusiness environment and the role management plays in effective and productive work situations. Principles of managerial control, coordination, communication, motivation, organization, and the role of management supervision and its influence on employee productivity, satisfaction, and organizational effectiveness. (30-0)

92:273 Equipment Maintenance and Management (2 s.h.) Maintenance and management of agricultural machinery and power units. (23-45)

Are you considering transferring to a four-year college or university?

Students who earn associate degrees in the Agricultural Technology programs at NIACC may wish to apply their studies toward a bachelor's degree in agriculture or agriculture-related fields at a four-year college or university. For further information on options in agricultural studies at Iowa State University, please see pages 131-153 in the catalog or speak with a NIACC advisor.

BUSINESS

Gary Christiansen, Division Head
(641) 422-4226

ACCOUNTING/ COMPUTING

Accounting with
Computers/Diploma
Accounting/Associate in
Science - Business Degree
Accounting/Transfer Curriculum

INFORMATION TECHNOLOGY

E-Commerce, Web Design, and
Development
Information Systems Technology
Senior Network Administrator

MARKETING/ MANAGEMENT

Financial Management/Insurance
General Business
Banking Option
Marketing and Sales
Retail Management
Supervision and Management
Diploma
Career Option

OFFICE TECHNOLOGY

Degree Programs
Administrative Secretary
Administrative Medical Secretary
Administrative Medical Secretary /
Transcription Specialist Option
Administrative Legal Secretary

Diploma Programs
General Secretary
Legal Secretary
Medical Secretary
Medical Transcription

BUSINESS DIVISION

The Business Division provides courses and programs for students who wish to transfer to a baccalaureate degree granting institution, for students who are undecided and are interested in a career option program, or for students who want a specific career program.

Transfer Students

Students need to take courses that will facilitate their transfer to the institution of their choice. Courses that would assist students who are business majors would be accounting, computers, statistics and spreadsheets. Other business courses may also transfer to many institutions (see pages 200-203 for specific degree requirements).

Career Option Students

For students interested in the business area but undecided as to what degree to pursue, career-option programs provide the flexibility these students need. Upon completion of a career-option program a student may choose to pursue a baccalaureate degree or go directly to a chosen occupational area. Career Option programs are available in Accounting/Computing, Marketing/Management, and Office Technology (see pages 200-203 for specific degree requirements).

Career Students

Students who are focused on a particular occupation may choose from a variety of business career programs. These programs follow a curriculum that assists each student in developing the knowledge, skills, and abilities necessary to be successful in his/her chosen field.

The Business Division's highest priority is to assist students in reaching their individual educational goals. Each instructor is dedicated to providing the highest quality instruction to facilitate this process.

ACCOUNTING/ COMPUTING

Accounting with Computers/Diploma
Accounting/Associate in Science -
Business Degree
Accounting/Transfer Curriculum

The focus in this cluster is accounting and computer technology. Each program provides courses that range from entry-level knowledge and skill development to more advanced levels. Students completing these programs are well prepared to be successful in entering the business field or in transferring to another institution.

Accounting with Computers/ Diploma

The Accounting with Computers/Diploma is designed to provide students with the skills, attitudes, and knowledge necessary to enter the field of bookkeeping and accounting; or the courses may be applied toward an Associate in Science-Business degree or an Associate in General Studies degree. The program may be completed in two semesters by following the suggested curriculum, or it may be spread out over three or more semesters. Upon satisfactory completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded a diploma. This recognition is granted to a person who has completed at least thirty (30) semester hours of credit.

The curriculum is implemented with classroom work, laboratory instruction and practice, and computerized accounting. Several accounting simulation projects, including manual and computerized, are completed to give the students experience in keeping a complete set of books. Many hours of computer experience in accounting, keyboarding, and word processing prepare students for full-time employment or for more advanced education in the accounting field.

Some of the occupational areas in which job opportunities may be found are:

- * Accounting Clerk
- * Accounting Technician
- * Accounts Payable
- * Accounts Receivable
- * Bookkeeper
- * Data Entry
- * Data Processing
- * General Office Clerk
- * Payroll

For specific information contact the North Iowa Career Center or the NIACC Business Division.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES:

15:107*Keyboarding for Office Technology	3 s.h.
15:110 Electronic Calculators.....	1 s.h.
15:118 Accounting Procedures	3 s.h.
15:119 Accounting Applications	5 s.h.
15:134 Computer Applications	3 s.h.
15:155 Payroll Accounting.....	3 s.h.
15:160 Computer Accounting.....	3 s.h.
15:212 Business Communication.....	3 s.h.
89:150 Employment Strategies	1 s.h.

* Prerequisite: Pass keyboarding test at 30 wpm with 3 errors or less.

ELECTIVE COURSES:

15:101 Introduction to Business	3 s.h.
15:120 Business Law I	3 s.h.
15:121 Business Law II	3 s.h.
15:140 Intro to Computers & Info. Systems	3 s.h.
15:144 Principles of Supervision	3 s.h.
15:149 Managing Human Resources.....	3 s.h.
15:154 Personal Income Tax	4 s.h.
15:175*Electronic Spreadsheets	3 s.h.
15:211*Word Processing	2 s.h.
15:221 Marketing.....	3 s.h.
15:241 Human Relations.....	3 s.h.
89:100 Cooperative Work Experience	2-5 s.h.

* Recommended Electives

For additional electives, see list of Business transfer courses near end of catalog.

SUGGESTED SCHEDULE

(For students planning to complete the program in one academic year)

First Term

15:107 Keyboarding for Office Technology	3 s.h.
15:110 Electronic Calculators.....	1 s.h.
15:118 Accounting Procedures	3 s.h.
15:134 Computer Applications	3 s.h.
15:212 Business Communication.....	3 s.h.
Elective.....	2 s.h.
	15 s.h.

Second Term

15:119 Accounting Applications	5 s.h.
15:155 Payroll Accounting.....	3 s.h.
15:160 Computer Accounting.....	3 s.h.
89:150 Employment Strategies	1 s.h.
Elective.....	3 s.h.
	15 s.h.
Total Hours	30 s.h.

Accounting/Associate in Science - Business Degree

NIACC's Accounting/Associate in Science - Business Program is a dual-purpose program designed to give the students the option of preparing for employment using their accounting and computer skills or transferring to a four-year institution and receiving a baccalaureate degree. For specific placement information or for transfer requirements, please contact the North Iowa Career Center, the NIACC Business Division, or your counselor.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree/Accounting. Students who plan to pursue a four-year degree and need to meet general education requirements of transfer institutions should strive for an Associate in Arts degree. Several of the first-year requirements are the same for both the ASB degree and the AA degree.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:110 Electronic Calculators.....	1 s.h.
15:112 Keyboarding Level I	1 s.h.
OR 15:113 Keyboarding Level II (1 s.h.)	
OR 15:107 Keyboarding for Office Technology (3 s.h.)	
15:109 Introduction to Accounting.....	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Principles I (3 s.h.)	
15:134 Computer Applications	3 s.h.
OR 15:140 Intro to Computers and Information Systems (3 s.h.)	
30:101 Communication Skills I.....	4 s.h.
40:121 Math for Decision Making.....	3 s.h.
OR Appropriate level math course until minimum requirement is met (3 s.h.)	
	15/17 s.h.

Second Term

15:119 Accounting Applications	5 s.h.
OR 15:151 Acctg. Principles II (3 s.h.)	
15:175 Electronic Spreadsheets	3 s.h.
30:102 Communications Skills II	4 s.h.
Elective in Humanities/Social Science.....	3 s.h.
Elective.....	3 s.h.
	16/18 s.h.

Third Term

15:120 Business Law I	3 s.h.
15:160 Computer Accounting.....	3 s.h.
15:241 Human Relations.....	3 s.h.
80:133 Macroeconomics	3 s.h.
Elective.....	3 s.h.
	15 s.h.

Fourth Term

15:155 Payroll Accounting.....	3 s.h.
80:134 Microeconomics	3 s.h.
89:150 Employment Strategies	1 s.h.
Business Electives	4 s.h.
Elective.....	3 s.h.
	14 s.h.
Total	60/62 s.h.

Business Electives

15:101 Intro to Business.....	3 s.h.
15:107 Keyboarding/Office Tech.....	3 s.h.
15:114 Computer Literacy	1 s.h.
15:118 Accounting Procedures	3 s.h.
15:119 Accounting Applications	5 s.h.
15:121 Business Law II	3 s.h.
15:140 Intro to Computers & Info Systems	3 s.h.
15:141 Intro to MIS.....	3 s.h.
15:150 Accounting Principles I.....	3 s.h.
15:151 Accounting Principles II.....	3 s.h.
15:154 Personal Income Tax	4 s.h.
15:171 Intro to Entrepreneurship.....	3 s.h.
15:174 Data Base Management.....	4 s.h.
15:210 Business Statistics	3 s.h.
15:211 Word Processing	2 s.h.
15:212 Business Communication.....	3 s.h.

Associate in Science - Business Requirements

- * 30 s.h. of 15:xxx courses
- * 8 s.h. of Communications
- * 9 s.h. of Social Sciences and/or Humanities
- * 3 s.h. of Natural Sciences (40:121, Math for Decision Making is minimum required for transfer)
- * A total of 60 s.h.

Accounting/Transfer Curriculum

Some of the courses listed on this page which apply toward an Associate in Science - Business degree will not count as transfer courses for an Associate in Arts degree. Please refer to the NIACC College Catalog for specific requirements or contact your counselor for assistance in determining your schedule to meet your goal.

COURSE DESCRIPTIONS -

Accounting/Computing

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.) Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wam (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, producing, and proofreading documents: memos, letters, envelopes, tables and reports. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in a business. (45-0)

15:110 Electronic Calculators (1 s.h.) A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30) [Also Open Entry/Open Exit]

* * * * *

Open Entry/Open Exit

15:110 Electronic Calculators (1 s.h.) [Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30)

15:112 Keyboarding Level I (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. This course covers the development of keyboarding techniques using the touch method on the computer to learn/review the alphabetic keys. The keyboarding goal is a minimum rate of 20 words a minute with 3 or less errors. Students with little or no keyboarding skill would begin at this level. (0-30)

15:113 Keyboarding Level II (1 s.h.) [Open Entry/Open Exit] Prerequisite: Keyboarding Level I OR ability to keyboard at 20 words a minute. This course covers the development of the touch method on the computer keyboard to learn/review the alphabetic, numeric, and symbol keys. The keyboarding goal is a minimum rate of 30 words a minute with 3 or less errors. (0-30)

15:114 Computer Literacy (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. Introduction to basic computer hardware and software functions. Emphasis on using the computer as a tool to create personal and business documents. Introductory windows, word processing, spreadsheet, and presentation units give students an opportunity to view software capabilities and use some of the features. Students with little or no computer background are encouraged to take this course. (0-30)

15:211 Word Processing (2 s.h.) [Open Entry/Open Exit] This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. (20-20)

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15:118 Accounting Procedures (3 s.h.) An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers, the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:119 Accounting Applications (5 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles with a grade of "C" or above. A continuation of Accounting Procedures including voucher system, partnerships, and corporations. Includes completion of an accounting simulation project. (75-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:121 Business Law II (3 s.h.) Prerequisite: 15:120, Business Law I, or permission of the instructor. A continuation of 15:120. Agency, corporations, partnerships, bailments, real property, wills, trusts, insurance, bankruptcy, and government regulation of business. Some information on international law and liability of accountants. (45-0)

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, data base management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:141 Management Information Systems I (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or permission of the instructor. The primary goal of MIS I is to prepare students to be productive participants in an information society. The course is designed to develop a broad understanding of business information systems, various ways to discern information from an information system, and look at ways to distribute this information. The student will also learn the basic principles and techniques for developing simple computer-based information systems for managerial decision support systems through an extensive group project component of the course. (45-0)

15:144 Principles of Supervision (3 s.h.) This course is designed for individuals who hold, or who will hold, supervisory positions. The course involves the study of the major managerial functions (planning, organizing, staffing, directing, and controlling) and is augmented by other pervasive areas of supervision such as communication, motivation, decision-making, and human relations. (45-0)

15:149 Managing Human Resources (3 s.h.) Course describes the transition from personnel management to human resources management. The focus is on the systematic process of recruitment, selection, developing, and appraising employees. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:151 Accounting Principles II (3 s.h.) Prerequisite: 15:150 Accounting Principles I, or equivalent. Course covers Statement of Cash Flows, financial statement analysis, job order and process cost systems, cost behavior, budgeting, standard costing, differential analysis and product pricing, capital investment analysis, activity-based costing, and just-in-time manufacturing. Emphasis is on management's use of accounting information. (45-0)

15:154 Personal Income Tax (4 s.h.) Personal Income Tax is a course that is designed to provide the student with an in-depth study of the preparation of the individual income tax return. The course is designed to assist the student in developing a broad understanding of the tax laws as they relate to the individual. The course content includes an examination of regulations pertaining to general tax return preparation and filing for an individual, the preparation of a variety of tax forms and schedules including the calculation of deductions and credits. Recent tax law changes are also examined. (66-0)

15:155 Payroll Accounting (3 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles I with a grade of "C" or above. A study of basic business taxes. Emphasis on payroll taxes including social security taxes, income taxes, and unemployment taxes; completion of quarterly and annual reports and a payroll simulation project. (45-0)

15:160 Computer Accounting (3 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles I with a grade of "C" or above. Designed to provide students with realistic experience with automated accounting consisting of five systems: general ledger, accounts payable, accounts receivable, depreciation, and payroll. Students will find themselves as having taken an

accounting position in a company already using a computerized accounting system. Students will be working in an individualized instruction environment. (45-0)

15:171 Introduction to Entrepreneurship (3 s.h.) Prerequisite: 15:101, Introduction to Business. This course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:174 Data Base Management (4 s.h.) Prerequisite: 15:140 Introduction to Computers and Information Systems. This course introduces students to data base concepts. The course will cover such topics as data base structure and design, data base engines, query languages, report writers, and the association between data bases and management information systems. The course will provide experience with a popular data base. (30-30)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, data bases, and business graphics using appropriate software. (30-30)

15:210 Business Statistics (3 s.h.) Prerequisite: 40:125, Quantitative Methods; 40:140, Intro to Statistics; or 40:151, College Algebra & Trig I. The use of statistical methods as an analytical tool in business situations. Data collection, tabular and graphical presentations, frequency distributions, probability, sampling, data analysis, hypothesis testing and regression, and correlation analysis. The use of statistical software is incorporated into the course. (45-0)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters, interoffice memorandums, and informal business reports. A secondary emphasis will be placed on oral communication, listening skills, nonverbal communication, and international communication. (45-0)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

40:121 Mathematics for Decision Making (3 s.h.) Prerequisite: Basic Arithmetic and Algebra skills as shown by one of the following: 1. A score of 16 or higher on the ACT Math Test or the ASSET Numerical Math Skills Test, or a score of 51 or higher on the Pre-Algebra part of the COMPASS Test AND a grade of "C" or better in 40:060, Beginning Algebra (at NIACC) or equivalent; 2. A score of 20 or higher on the ACT Math Test or the ASSET Numerical Math Skills Test or 51-75 on the Algebra section of the COMPASS test. Mathematics for Decision Making provides a survey of mathematics topics that includes sets, logic, probability, statistics, sets of numbers, algebra, geometry, and consumer math. This course will fulfill 3 hours of Natural Sciences requirement for the A.A. Degree. (45-0)

80:133 Macroeconomics (3 s.h.) An introductory study of how people use scarce resources to satisfy their many material wants and needs. The emphasis is on the determination of national income, output, employment and prices, and the role of the money and banking system in a market economy. (45-0)

80:134 Microeconomics (3 s.h.) Prerequisite: 80:133, Macroeconomics. Requires knowledge of basic high school algebra or its equivalent. Analysis of individual consumer and firm behavior, theories of production and consumption, pricing and the market system, perfect and imperfect competition, business and labor regulation, market structure, international trade and finance, and current economic problems. (45-0)

89:100 B-C-D-E Cooperative Work Experience (2-5 s.h.) Practical training on the job under the cooperative supervision of the college and work supervisor. Designed primarily for the college-transfer students to provide an experience that: (1) is directly related to their college program and career objectives; or (2) will help them test out career interest and/or discover new career possibilities. Credit is determined on the basis of one semester of credit for each 60 hours of approved employment to be completed in a term. Appropriateness of learning objectives is an essential factor in the approval process. This course is repeatable up to 12 semester hours. (15-285)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

INFORMATION TECHNOLOGY

E-Commerce, Web Design and Development

E-Commerce, Web Design and Development provides students an opportunity to gain both a general knowledge of this dynamic profession as well as greater levels of specialization in a student-chosen option of study. As such, each graduate will be exposed to a common core of knowledge in E-Commerce, Web Design and Development as well as specialized education in one of four programmatic options: 1) Web Application Development; 2) Web Graphic Design; 3) E-Business; and 4) E-Entrepreneurship.

E-Business

Provide strategic e-commerce marketing planning, including competitive analysis, electronic business planning, systems planning and organizational structuring to support and enhance the company's overall marketing efforts. Develops complete business strategy, technology architecture and planning, design and development of new applications utilizing the Web/Internet, Intranet, EDI, and security audits. Often works in a team environment with talented professionals. Experienced in Web technology surrounding delivery methods and systems, is able to plan and create marketing strategies for full service/product exposure using the Web's state-of-the-art technology, and is able to rationalize and formulate new/current marketing techniques for an organization's return on investment (ROI) and cost savings. Directs corporate Web marketing and e-business strategies involving product/service delivery, advertising, coordination of public and media relations, special events, overseeing customer support and satisfaction surveys. Directs Web departments toward meeting business objectives. Focus is to develop overall strategy & implementation of corporate Web efforts including brand management, look and feel, site intent, product and service delivery. Team with a wide variety of internal departments to coordinate Web operations.

E-Entrepreneurship

Perceives and utilizes the Internet as a strategic advantage to achieve business goals. Designs and builds complex electronic business systems for e-commerce start-ups. Often works in a team environment with talented professionals. Understands that the Web inherently involves the creation, transformation of relationships for value creation within organizations, between organizations (business-to-business e-commerce), and between organizations and individuals (business-to-consumer e-commerce). Skilled in developing and implementing a business plan, including marketing and financial resource development and management. Accepts higher risks with the potential for higher rewards.

Web Application Development

Plans and takes responsibility for the success of a Web business operation/venture. Often works in a team environment with talented professionals. Experienced and knowledgeable about configuring and maintaining server, network or security systems for Intranet or Web operations. Experienced in the design and development of software, middleware, or systems utilizing new technology and demonstrating and delivering services through a Web presence. Experienced site designer and developer, including the management of teams to implement the business Web plan.

Web Graphic Design

Directs and implements the creative development and utilization of all Web-based tools; creates and implements new technology that increases efficiency of product/service delivery systems and improves client/user interactivity. Often works in a team environment with talented professionals. Experienced in the design and production of graphics/images that are compatible with Web standards, proficiently utilizes standard graphics applications with skills producing vector images, bit map images, HTML, animation 2D, and photo manipulation. Directs the visual identity of Web site design as well as ensures content production is met on time and within budget.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree in E-Commerce, Web Design and Development.

ENTRANCE REQUIREMENTS

1. Completion of Algebra II in high school with a "C" or better, or
2. College Intermediate Algebra or equivalent with a "C" or better, or
3. COMPASS Algebra test with a score of 76 - 100, or
4. ACT math score of 20 or above.
5. Students must have completed 15:140, Introduction to Computers & Information Systems before entering this program.

SUGGESTED SCHEDULE

E-Commerce Core Courses

15:156 Networking I	4 s.h.
15:167 Network Security	3 s.h.
15:169 Media Experience.....	3 s.h.
15:186 Internet Programming I.....	3 s.h.
15:191 Introduction to E-Commerce	3 s.h.
15:194 E-Commerce Cases	4 s.h.
15:196 Structure and Design.....	3 s.h.
15:201 Visual Communication.....	3 s.h.
	26 s.h.

General Education Requirements

Communications	8 s.h.
Social Sciences and/or Humanities.....	9 s.h.
Natural Sciences	3 s.h.
	20 s.h.

E-Business Specialization Requirements

15:101 Introduction to Business	3 s.h.
15:142 Principles of Management.....	3 s.h.
15:197 Internet Law.....	3 s.h.
15:221 Marketing.....	3 s.h.
Electives	6-10 s.h.
	18-22 s.h.

E-Entrepreneurship Specialization Requirements

15:171 Introduction to Entrepreneurship	3 s.h.
15:172 Managing the Entrepreneurial Venture ..	3 s.h.
15:173 Seminar in Entrepreneurship.....	3 s.h.
15:197 Internet Law.....	3 s.h.
Electives	6-10 s.h.
	18-22 s.h.

Web Application Development Specialization Requirements

15:187 Internet Programming II.....	3 s.h.
15:188 Web Server Development	4 s.h.
15:199 Web Application Development	3 s.h.
15:202 Web Design.....	3 s.h.
15:203 Server Side Scripting.....	4 s.h.
15:204 Java.....	4 s.h.
	21 s.h.

Web Graphic Design Specialization Requirements

10:201 2-D Design	3 s.h.
10:202 Graphic Design.....	3 s.h.
10:220 Digital Illustration	3 s.h.
15:202 Web Design.....	3 s.h.
Electives	4-9 s.h.
	16-21 s.h.

Note: Summer enrollment is required.

Information Systems Technology

NIACC's Information Systems Technology Program is a diverse program allowing students to choose their career path. The IST program incorporates several options -- Network Administration, Management Information Systems, Desktop Systems, and Web System Support. Students have the option of obtaining employment using their computer skills or transferring to a four-year institution and receiving a baccalaureate degree.

The program provides opportunities for students to pursue a variety of computer professional certifications including: Cisco's Certified Network Associate, Microsoft's Certified System Engineer, Novell's Certified Administrator, and A+ Certification.

Graduates may work as LAN or WAN administrators or specialists, Web systems support, PC support, help desk administrators, or many other positions in the technology field.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree in Information Systems Technology.

ENTRANCE REQUIREMENTS

1. Completion of Algebra II in high school with a "C" or better, or
2. College Intermediate Algebra or equivalent with a "C" or better, or
3. COMPASS Algebra test with a score of 76 - 100, or
4. ACT math score of 20 or above.
5. Students must have completed 15:140, Introduction to Computers & Information Systems before entering this program.

SUGGESTED SCHEDULE

First Year - IST Core Classes

15:141 Management Information Systems I.....	3 s.h.
15:156 Networking I	4 s.h.
15:157 Networking II	4 s.h.
15:161 Operating Systems I.....	3 s.h.
15:177 Operating Systems II.....	3 s.h.
15:169 Media Experience.....	3 s.h.
15:196 Structure & Design (3 s.h.-- MIS requirement only in place of Media Experience)	
	20 s.h.

First Year - General Education Requirements

Communications	8 s.h.
Social Sciences and/or Humanities.....	9 s.h.
Natural Sciences	3 s.h.
	20 s.h.
Total Hours	40 s.h.

2nd Year Options**

Network Administration

15:158 Networking III	4 s.h.
15:159 Networking IV	4 s.h.
15:163 Network Operating Systems	4 s.h.
15:166 Inter/Intranet Application Management ..	4 s.h.
15:167 Network Security	3 s.h.
Elective*	4 s.h.
	23 s.h.

MIS

15:164 Groupware Applications I	4 s.h.
15:165 Groupware Applications II	4 s.h.
15:168 Introduction to Programming	4 s.h.
15:169 Media Experience.....	3 s.h.
15:174 Data Base Management	3 s.h.
15:204 Java.....	4 s.h.
	22 s.h.

Desktop Systems

15:163 Network Operating Systems.....	4 s.h.
15:164 Groupware Applications I	4 s.h.
15:165 Groupware Applications II	4 s.h.
15:174 Data Base Management.....	3 s.h.
15:176 Advanced Desktop Applications.....	3 s.h.
15:178 Hardware Service and Support	4 s.h.
	22 s.h.

Web Systems Support

15:163 Network Operating Systems	4 s.h.
15:164 Groupware Applications I	4 s.h.
15:165 Groupware Applications II	4 s.h.
15:166 Inter/Intranet Application Management ..	4 s.h.
15:167 Network Security	3 s.h.
	19 s.h.

*Choose one of the following electives for the Network Administration option:

15:162 Novell Administration	4 s.h.
15:164 Groupware Applications I	4 s.h.
15:178 Hardware Service and Repair	4 s.h.

** The program requires 60 credit hours for completion.

Note: Summer enrollment may be required.

Note: Some second year options cannot be completed at night.

Recommended Elective Courses are as follows:

15:142 Principles of Management.....	3 s.h.
15:109 Introduction to Accounting.....	3 s.h.
OR	
15:118 Accounting Procedures (3 s.h.)	
OR	
15:150 Accounting Principles I (3 s.h.)	
15:151 Accounting Principles II	3 s.h.
15:171 Intro to Entrepreneurship.....	3 s.h.
15:172 Managing the Entrepreneurial Venture ..	3 s.h.
15:173 Seminar in Entrepreneurship.....	3 s.h.
15:175 Electronic Spreadsheets	3 s.h.

Senior Network Administration

The Senior Network Administrator Program is designed to prepare students for employment in network design and implementation in Fortune 500 corporations, Internet Services Providers, Telephone Companies, and consulting companies. This program allows the student to prepare for several Cisco Certifications including:

The CCNP certification (Cisco Certified Network Professional) indicates advanced or journeyman knowledge of networks. With a CCNP, a network professional can install, configure, and operate LAN, WAN, and dial access services for organizations with networks from 100 to more than 500 nodes, including but not limited to these protocols and topics: IP, IGRP, IPX, Async Routing, AppleTalk, Extended Access Lists, IP RIP, Route Redistribution, RIP, Route Summarization, OSPF, VLSM, BGP, Serial, Frame Relay, ISDN, ISL, X.25, DDR, PSTN, PPP, VLANs, Ethernet, Access Lists, 802.10, FDDI, Transparent and Translational Bridging.

The CCDP certification (Cisco Certified Design Professional) indicates advanced or journeyman knowledge of network design. With a CCDP, a network professional can design routed and switched networks involving LAN, WAN, and dial access services for businesses and organizations with 100 to more than 500 nodes.

Students also gain project management skills and study emerging Internet and networking technologies.

NIACC's computer labs are equipped with the latest in computers and networking equipment to allow students the highest quality hands-on experience. Classes are lead by Cisco certified instructors.

ENTRANCE REQUIREMENTS

To enroll in the Senior Network Administrator Program, students must meet at least one of the following requirements:

- * Passed the CCNA exam and have a computer-related college degree, such as MIS.
- * Passed the CCNA exam and have 2 years of professional computer experience, preferably in networking.
- * Completed Networking I-IV from NIACC or another Cisco Academy with 70% or better final Cisco assessments.
- * Successfully completed equivalent corporate Cisco CCNA training.

Students must also meet all other general NIACC and IST requirements.

Individuals who do not meet these requirements, and wish to attain the CCNA and/or CCNP certification, should complete NIACC's Information Systems Technology Program.

Classes may be scheduled day or night and students may need to take summer classes to complete the program in a timely manner.

REQUIRED TECHNICAL COURSES/SUGGESTED SCHEDULE**

15:277 Network Routing.....	5 s.h.
15:278 Network Remote Access.....	5 s.h.
15:285 Multi-Layer Switching.....	5 s.h.
15:286 Network Support.....	5 s.h.
15:287 Emerging Remote Access Technologies...	3 s.h.
15:288 Network Design I.....	3 s.h.
15:289 Network Design II.....	4 s.h.
15:290 Fundamentals of Project Management ..	4 s.h.
Total Hours	34 s.h.

**Courses at night will be 8 weeks in duration. Day courses will follow the NIACC academic calendar.

In order to receive the A.S.B. degree in Senior Network Administration, students must satisfactorily complete the above technical core courses, satisfy 20 s.h. of general education (per page 201), complete 6 s.h. of elective credits, and maintain an overall 2.00 (C) grade point average.

COURSE DESCRIPTIONS

E-Commerce, Web Design and Development Information Systems Technology Senior Network Administration

10:201 Two-Dimensional Design (3 s.h.) Students/artists explore the process of visual problem solving through participation in class critiques of individual projects. Perception and structure: exploring visual order emphasizing two-dimensional concepts. (20-50)

10:202 Graphic Design (3 s.h.) Prerequisite: 10:201, Two-Dimensional Design. Creative problem solving through the exploration of aesthetic and technical aspects of graphic design using computer-aided design software. (20-50)

10:220 Digital Illustration (3 s.h.) Prerequisite: 10:201, Two-Dimensional Design. Recommended: 10:150, Creative Photography, or 10:202, Graphic Design. Creation and manipulation of digital imagery is explored in the context of creative expression. User interactivity, animation, full-color printing, and computer art theories are covered. The student completes visual projects with instructor guidance. (30-30)

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business

problems using electronic spreadsheets, word processing software, data base management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, data base management software, and presentation software. Students also are exposed to web use, file management, and simple web page development. (45-0)

15:141 Management Information Systems I (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or permission of the instructor. The primary goal of MIS I is to prepare students to be productive participants in an information society. The course is designed to develop a broad understanding of business information systems, various ways to discern information from an information system, and look at ways to distribute this information. The student will also learn the basic principles and techniques for developing simple computer-based information systems for managerial decision support systems through an extensive group project component of the course. (45-0)

15:142 Principles of Management (3 s.h.) Prerequisite: 15:101, Introduction to Business, is recommended. Provides students with a general introductory management learning experience. Role of management in today's business environment; management's influence on employee productivity, employee satisfaction and organizational effectiveness; major control devices of management. (45-0)

15:156 Networking I (4 s.h.) Prerequisite: 15:140, Introduction to Computers & Information Systems. This course provides an overview of networking, including such topics as networking advantages, OSI layers, addressing and routing protocols, and LAN design, topologies, and cabling. (60-0)

15:157 Networking II (4 s.h.) Prerequisite: 15:156, Networking I. A continuation of Networking I. Provides overview of Ethernet, token ring, ATM, and FDDI; examines routing and addressing issues; studies router setup and configuration; examines LAN designing, testing, and switching; and studies TCP/IP protocol and addressing. (45-30)

15:158 Networking III (4 s.h.) Prerequisite: 15:157, Networking II. A continuation of Networking II. Addresses such topics as advanced router configurations, LAN switching, networking management, and advanced network design. (45-30)

15:159 Networking IV (4 s.h.) Prerequisite: 15:158, Networking III. A continuation of Networking III. Using primarily hands-on, project-based learning, this course includes advanced network design projects and advanced network management projects. This course addresses WAN Design, PPP, ISDN, and Frame Relay. (45-30)

15:161 Operating Systems I (3 s.h.) Prerequisite: 15:140, Introduction to Computers & Information Systems. This course introduces students to the use of such popular operating systems as Microsoft DOS, Windows 95, Windows 98, Windows NT Workstation, UNIX, and Apple Macintosh. This course also addresses operating system interface and controls; file system management; application management; and network client configuration. (30-30)

15:162 Novell Administration (4 s.h.) Prerequisite: 15:161, Operating Systems I. This course provides an overview of where networking operating systems fit into the network solution, including such topics as the components and features of a network operating system, major network operating systems, operating system setup and configuration, network client issues, WAN issues, and network operating system selection criteria. (45-30)

15:163 Network Operating Systems (4 s.h.) Prerequisite: 15:177, Operating Systems II. This course is a continuation of Network Operating Systems I that goes into greater detail on such topics as network operating system design and installation; basic, user, peripheral, and application configurations; security issues; workstation and client setup; system management; and WAN/LAN issues. (45-30)

15:164 Groupware Applications I (4 s.h.) Prerequisite: 15:140, Introduction to Computers & Information Systems. This course provides an introduction to such applications as electronic mail, shared calendars, document sharing, bulletin boards, voice and video conferencing, and applications within a networked environment. The course will also include an examination of groupware application features, groupware configuration and management, the relation of desktop applications to group products, a comparison of specific groupware products, and social issues related to groupware applications. (45-30)

15:165 Groupware Applications II (4 s.h.) Prerequisite: 15:164, Groupware Applications I. This course builds on the Groupware Applications I. The course covers such topics as the advantages and disadvantages of a groupware application, installation requirements, initial configuration, interfacing applications, advanced use of applications, and troubleshooting. (45-30)

15:166 Inter/Intranet Application Management (4 s.h.) Prerequisite: 15:162, Network Operating Systems, and 15:177, Operating Systems II, or permission of the instructor. This course enables students to design, set up, configure, and manage such Inter/Intranet services as the World Wide Web, electronic mail, domain name service, file transfer protocol; to gain knowledge of such merging applications as streaming audio and video and Internet phone; and to gain insight into the management of these services. (45-30)

15:167 Network Security (3 s.h.) Prerequisite: 15:156, Networking I. This course will provide an overview of issues related to security in a networked environment, including such topics as security and disaster

recovery, security within information services, security within an organization, virus protection, and Internet security/firewalls. (30-30)

15:168 Introduction to Programming (4 s.h.) Prerequisite: 15:140, Introduction to Computers & Information Systems, and 15:196, Structure and Design. This course provides students exposure to computer program design, structure, development, and troubleshooting through an examination of such topics as logic concepts, variables, input/output, iterative constructs, conditional flow, modular design, and the comparison of programming languages. (45-30)

15:169 Media Experience (3 s.h.) Prerequisite: 15:140, Introduction to Computers. This course covers comprehensively the latest version of HTML. Students will learn good coding practices and be introduced to web development tools and FTP programs. Students will also be introduced to SSI (ServerSide Includes), CSS (Cascading Style Sheets), image management, browser helper applications, and basic JavaScript. (30-30)

15:171 Introduction to Entrepreneurship (3 s.h.) Prerequisite: 15:101, Introduction to Business. This course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:172 Managing the Entrepreneurial Venture (3 s.h.) 15:101, Introduction to Business, or 15:171, Introduction to Entrepreneurship, are recommended. The course provides students with the tools necessary to manage and grow a small business. Students will examine the characteristics of successful small businesses and develop insights on developing strategies for successfully growing existing ventures. Students will also learn the process of evaluating the marketing and financial needs of the venture and understand the components of a business plan. (45-0)

15:173 Seminar in Entrepreneurship (3 s.h.) Prerequisite: 15:171, Introduction to Entrepreneurship, and 15:172, Managing the Entrepreneurial Venture. Course will combine group discussions with an actual case project at a local entrepreneurial firm. Students will have an opportunity to apply business skills learned throughout their NIACC program as they complete a project for a local entrepreneurial venture. Students also will discover key entrepreneurial success characteristics. (38-15)

15:174 Data Base Management (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems. This course introduces students to data base concepts. The course will cover such topics as data base structure and design, data base engines, query languages, report writers, and the association between

data bases and management information systems. The course will provide experience with a popular data base. (30-30)

15:176 Advanced Desktop Applications (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems. Advanced topics in desktop computer applications will be studied in this course. Students will also examine integrated software packages such as Microsoft Office Professional in this class. They will utilize integrated software to solve several business problems presented to them allowing them to gain an understanding of integrated software, as well as other desktop applications, through hands-on experience. The course will be project-based, providing the student with a collaborative environment. (30-30)

15:177 Operating Systems II (3 sh.) Prerequisite: 15:140, Introduction to Computers and Information Systems, and 15:161, Operating Systems I. This course is a continuation of Introduction to Operating Systems. Students will address advanced topics of operating systems such as Microsoft DOS, Windows 95, Windows 98, Windows NT Workstation, UNIX, and Apple Macintosh. Topics will include installation, troubleshooting, registry, batch files, configuration, network and Internet features, and utilities. (30-30)

15:178 Hardware Service and Support (4 sh.) Prerequisite: 15:140, Introduction to Computers and Information Systems, 15:161, Operating Systems I, or permission of instructor. This course prepares the student to properly install, configure, upgrade, troubleshoot and repair microcomputer hardware. This includes basic knowledge of desktop and portable systems, basic networking concepts, and printers. The student must also demonstrate knowledge of safety and common preventive maintenance procedures. Topics include advanced DOS and Windows concepts such as batch files and memory management, installing and uninstalling software, basic hardware installation, and troubleshooting. (30-60)

15:186 Internet Programming I (3 s.h.) Prerequisite: 15:169, Media Experience, and 15:196, Structure and Design. This course will teach the fundamentals of client-side web scripting with JavaScript. Students will learn about browser-related object models and their associated properties, events, and methods. Students will work with these models to create documents on the fly, create pop-up documents, manage images, manage framesets, create roll-overs, enable and validate form elements, manage cookies, create and maintain basic databases, define and enable custom objects, and create various web-related tools. (30-30)

15:187 Internet Programming II (3 s.h.) Prerequisite: 15:186, Internet Programming I. This course will allow students to continue building their JavaScripting tools while learning how to program in PERL. Students will learn how to access server documents, create and manage databases, and build bulletin boards. A lot of time will be spent building solutions that require PERL, HTML, and JavaScript together. (30-30)

15:188 Web Server Development (4 s.h.) Prerequisite: 15:187, Internet Programming I. This course gives students a solid understanding of what is going on behind the scenes of a Web site and the Internet. Students will learn the concepts and components that make up Web servers along with the support of these Web servers. Topics such as planning, domains, configuration, testing, web protocols and services, recovery, security, log files, databases, indexing, CGI, ASP, JSP, clients, transactions, plug-ins, and SSL will be covered. The course will provide experience with popular web servers. (30-60)

15:191 Introduction to E-Commerce (3 s.h.) Prerequisite: 15:140, Introduction to Computers. This course provides students with foundational skills and general information about electronic business solutions on the World Wide Web. Topics will include features of Internet marketing, sales, computer graphics, and network security. Students will also be introduced to Internet-related programming concepts and tools used to create web-based solutions. (30-30)

15:194 E-Commerce Cases (4 s.h.) Investigate current E-Commerce basics and real life scenarios regarding electronic business practices. This capstone course will tie together previous E-Commerce courses to real life applications. (30-60)

15:196 Structure and Design (3 s.h.) Prerequisite: 15:140, Introduction to Computers & Information Systems. A fundamental requirement for people in the Information Technology field is the ability to organize a solution to a problem. This, in and of itself, is a difficult task. Often, however, this skill takes a backseat to learning code or is lost in the complexity of the task. Structure and Design concentrates on the process of developing a logical algorithmic solution to a problem. (45-0)

15:197 Internet Law (3 s.h.) Prerequisite: 15:140, Introduction to Computers & Information Systems. Students will learn and examine legal issues associated with e-commerce, including but limited to, intellectual property protection, rights of privacy, content control, antitrust, and problems of jurisdiction. (45-0)

15:199 Web Application Development (3 s.h.) Prerequisite: 15:187, Internet Programming II. This course will build on the student's prior Internet Programming knowledge and give them an overview of various web application development resources, tools, languages, and technologies. Students will be introduced to various current tools and technologies available to a Web Developer for development and begin to understand the situations each works best in. Emphasis will be on compare and contrast techniques, proper planning, relating the syntax and elements to other tools and languages, knowledge transfer, how interaction takes place, design, and developing an understanding and use of programming resources. (30-30)

15:201 Visual Communication (3 s.h.) This course is an introduction to visual problem solving and communication through the World Wide Web. This course will cover basic technical terminology, an overview of software and equipment for web graphic design and an introduction into digital imagery. Studio assignments will be digitized and sent electronically for evaluation and critique. The goal is to expand student competency in basic visual and technical skills, develop an understanding of how perception relates to communication, and expose students to current issues related to web graphic design. (30-30)

15:202 Web Design (3 s.h.) Prerequisite: 15:201, Visual Communications. This course is an expansion of graphic design concepts merging traditional page design, typography, and digital imagery into the concepts and practices of web design. This studio course will cover the preparation of digital images, compositional dynamics, and sequencing of images into a complete working web design. Students will work with current graphic and digital imaging software and web authoring software. (30-30)

15:203 Server Side Scripting (4 s.h.) Prerequisite: 15:187, Internet Programming II. Students will learn to develop and implement web applications using server side scripting with emphasis on a single language. Additional server side scripting languages and technologies will be discussed. Much of the languages object model and methods will be covered with focus on how to work with these objects and procedures. Students will gain hands-on experience while writing real world-based web applications from the ground up. Database basics will also be learned along with SQL. Simple databases will be created for use with web application back-ends. Students will learn to access and modify their databases by building front-ends for them using server side scripting and embedded SQL. Sufficient time will be spent building solutions that require using ASP, HTML, JavaScript, and various other server side scripting technologies together. (30-60)

15:204 Java (4 s.h.) Prerequisite: 15:203, Server Side Scripting. This course introduces students to doing purely object-oriented programming using the Java syntax. Emphasis is placed on using Java for web development. Students learn how to create their own objects and employ these objects as solutions to common real world-based web problems using applications and applets. Students will learn to create interactive elements and simple GUI elements. Use of the java.awt components, event-handling model, containers, and layout managers will also be emphasized. File handling techniques and multithreading will be presented, along with JavaBeans. Applications and applets will be built from button up to facilitate in deeper understanding of the concepts used in OOP. (30-60)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:277 Network Routing (5 s.h.) Prerequisite: 15:159, Networking IV. This course focuses on advanced routing using Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs) typically found at medium to large network sites. Upon completion of this training course, the student will be able to select and implement the appropriate Cisco IOS services required to build a scalable routed network. (45-60)

15:278 Network Remote Access (5 s.h.) Prerequisite: 15:277, Network Routing. Remote Access focuses on advanced WAN configurations, building remote access networks. The course teaches students how to build a remote access network to interconnect central sites to branch offices and home offices for telecommuters. The course further teaches students how to control access to the central site and how to maximize bandwidth utilization over the remote links. (45-60)

15:285 Multi-Layer Switching (5 s.h.) Prerequisite: 15:159, Networking IV, or CCNA certification. This course leads to the CCNP or CCDP. In this course, network administrators learn how to build campus networks using multilayer switching technologies over high speed Ethernet. This course includes both routing and switching concepts, covering both Layer 2 and Layer 3 technologies. (45-60)

15:286 Network Support (5 s.h.) Prerequisite: 15:277, Network Routing; 15:278, Network Remote Access; and, 15:185, Multi-Layer Switching. This course leads to the CCNP. This course teaches students how to baseline and troubleshoot an environment using Cisco routers and switches for multi-protocol client hosts and servers connected with the following: Ethernet and Fast Ethernet LANS, Serial, Frame Relay, and ISDN BRI WANs. The course provides students with methodical practice using specific Cisco IOS software and Catalyst software tools to diagnose and correct problems on widely installed Cisco products. (45-60)

15:287 Emerging Remote Access Technologies (3 s.h.) Prerequisite: 15:159, Networking IV. Introduces end-to-end Digital Subscriber Line (DSL) and cable modem technologies with focus on hands-on lab training for technicians on installing, configuring and troubleshooting DSL CPE equipment and infrastructure in a small business environment. Also touches upon Wireless and other emerging communications technologies. (30-30)

15:288 Network Design I (3 s.h.) Prerequisite: 15:158, Networking III. This course leads to the CCDA certification. The CCDA certification (Cisco Certified Design Associate) indicates a foundation or apprentice knowledge of network design for the small office/home office (SOHO) market. CCDA certified professionals can design routed and switched networks involving LAN, WAN, and dial access services for businesses and organizations with networks of fewer than 100 nodes. (45-0)

15:289 Network Design II (4 s.h.) Prerequisite: 15:288, Network Design I; 15:277, Network Routing; 15:278, Network Remote Access; and, 15:285, Multi-Layered Switching. This course leads to the CCDP certification. The CCDP certification (Cisco Certified Design Professional) indicates advanced or journeyman knowledge of network design. With a CCDP, a network professional can design routed and switched networks involving LAN, WAN, and dial access services for businesses and organizations with 100 to more than 500 nodes. (60-0)

15:290 Fundamentals of Project Management (4 s.h.) Prerequisites: 15:141, MIS I and 15:158, Networking III, or permission of the instructor. Fundamentals of Project Management defines a project and the role of projects in business. Students identify and demonstrate the basic knowledge areas of Project Management and the Project Management Framework. These knowledge areas focus on managing project components including: Integration, Scope, Time (scheduling), Cost, Quality, Human Resource, Communications, Risk, and Procurement. Fundamentals of Project Management clarifies the relationship between Project Management and other management disciplines including general management knowledge and practice, and application-area knowledge and practice. Students learn to apply the breakdown of project phases and processes and construct project plans that employ project phasing and knowledge areas. Students also learn to identify the aspects of project-based organizational systems and classify business organizations by type and project characteristics. Critical Path Method (CPM) project scheduling is learned and utilized to coordinate project planning, execution and analysis throughout a project life cycle. (45-30)

MARKETING/ MANAGEMENT

Financial Management/Insurance

General Business
Banking Option

Marketing and Sales

Retail Management

Supervision and Management
Diploma
Career Option

MARKETING/MANAGEMENT

Programs in this area are broad in scope and provide each student with a variety of skills necessary to be successful in the business environment. Marketing and management opportunities are readily available for students that have well-developed "high tech and high touch" skills.

Entrepreneurship and Small Business Management

The John Pappajohn Business and Entrepreneurial Center began operations at NIACC in April 1997. The center offers comprehensive entrepreneurial training and support programs for entrepreneurs, small business owners, and students.

The program provides students with an understanding of the many facets of entrepreneurship. Students will learn the process of identifying a business opportunity and developing an organization to establish a new venture. The curriculum will provide students with the proper tools to evaluate the feasibility of a new venture and to identify the available resources for assisting an entrepreneur during the start-up phase of the business.

Once a new venture has been launched, a new divergent set of challenges face the entrepreneur. The entrepreneur is typically responsible for strategic planning, financial management, marketing, human resource management, and operations. Although the entrepreneur may not be required to have a strong grasp of every specific detail, he/she must have a solid understanding of the critical issues facing the business. Thus, students will also receive instruction on managerial functions associated with owning a small business.

NIACC is working to combine classroom instruction with practical experience to enhance the development of a student's entrepreneurial and small business management skills. For specific information about the program, contact the NIACC Business Division or Pappajohn Center.

Integration into NIACC's Credit Program

The entrepreneurship option would likely be included as an additional component of the Marketing/Management program in the Business Division. However, we do not believe the courses should be limited to business students.

We will offer three courses, with primary emphasis within the Business Division. These courses will be: (1) Introduction to Entrepreneurship; (2) Managing the Entrepreneurial Venture; and (3) Seminar in Entrepreneurship. A brief description of the courses is provided below.

15:171 Introduction to Entrepreneurship (3 s.h.)

Prerequisite: 15:101, Introduction to Business. This course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:172 Managing the Entrepreneurial Venture (3 s.h.)

15:101, Introduction to Business, or 15:171, Introduction to Entrepreneurship, are recommended. The course provides students with the tools necessary to manage and grow a small business. Students will examine the characteristics of successful small businesses and develop insights on developing strategies for successfully growing existing ventures. Students will also learn the process of evaluating the marketing and financial needs of the venture and understand the components of a business plan. (45-0)

15:173 Seminar in Entrepreneurship (3 s.h.)

Prerequisite: 15:171, Introduction to Entrepreneurship, and 15:172, Managing the Entrepreneurial Venture. Course will combine group discussions with an actual case project at a local entrepreneurial firm. Students will have an opportunity to apply business skills learned throughout their NIACC program as they complete a project for a local entrepreneurial venture. Students also will discover key entrepreneurial success characteristics. (38-15)

Financial Management/ Insurance Program

Associate in Science-Business (ASB)

NIACC's Financial Management/Insurance Program is designed to prepare graduates with employable skills related to the insurance and financial management career fields.

The purpose of this degree is to provide a degree goal for students who choose to follow a course of study designed to give the student the option of obtaining employment in business.

Upon the completion of the curriculum with a grade point average of 2.00 (C), the student is awarded an Associate in Science-Business Degree/Financial Management (see pages 200-203 for specific degree requirements).

Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. degree.

REQUIRED COURSES/SUGGESTED SCHEDULE

(Two-Year Program)

First Term

15:101 Introduction to Business	3 s.h.
15:140 Intro to Computers and Information Systems.....	3 s.h.
15:190 General Insurance.....	3 s.h.
30:101 Communication Skills I	4 s.h.
40:121 Mathematics for Decision Making	3 s.h.
	16 s.h.

Second Term

15:175 Electronic Spreadsheets	3 s.h.
15:195 Property & Casualty Insurance.....	3 s.h.
30:102 Communication Skills II	4 s.h.
40:125 Quantitative Methods	3 s.h.
General Education Elective	3 s.h.
	16 s.h.

Third Term

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Principles I (3 s.h.)	
15:120 Business Law I	3 s.h.
15:200 Life, Health, & Disability Insurance.....	3 s.h.
80:133 Macroeconomics	3 s.h.
Elective.....	3 s.h.
	15 s.h.

Fourth Term

15:121 Business Law II	3 s.h.
15:151 Accounting Principles II	3 s.h.
OR 15:119 Acctg. Apps. (5 s.h.)	
80:134 Microeconomics	3 s.h.
89:100 Cooperative Work Experience.....	3 s.h.
Elective.....	3 s.h.
	15 s.h.
Total Hours	62 s.h.

Elective Courses

15:107 Keyboarding for Office Technology	3 s.h.
15:110 Electronic Calculators.....	1 s.h.
15:112 Keyboarding Level I.....	1 s.h.
15:113 Keyboarding Level II.....	1 s.h.
15:142 Prin. of Management	3 s.h.
15:160 Computer Accounting.....	3 s.h.
15:210 Business Statistics	3 s.h.
15:221 Marketing.....	3 s.h.
15:223 Prin. of Selling	3 s.h.
15:241 Human Relations.....	3 s.h.
89:150 Employment Strategies	1 s.h.

General Business

NIACC's General Business Program is a dual-purpose program designed to give the student the option of obtaining employment upon graduation or transferring to a four-year institution. It is for the student who is interested in business but does not have a particular area in mind.

Graduates are generally placed in sales, management, or general business (office, shipping and receiving, quality control) positions with industrial and retail firms. For specific placement information, contact the North Iowa Career Center or the NIACC Business Division.

Upon the completion of the curriculum with a grade point average of 2.00 (C), the student is awarded an Associate in Science-Business Degree/General Business (see pages 200-203 for specific degree requirements). Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions, should pursue the A.A. degree (see pages 200-203). This will necessitate a slightly different curriculum.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

15:101	Introduction to Business	3 s.h.
15:120	Business Law I	3 s.h.
15:121	Business Law II	3 s.h.
15:134	Computer Applications	3 s.h.
	OR 15:140 Intro to Computers and Information Systems (3 s.h.)	
30:101	Communication Skills I	4 s.h.
30:102	Communication Skills II	4 s.h.
40:121	Mathematics ¹	3 s.h.
80:133	Macroeconomics	3 s.h.
80:134	Microeconomics	3 s.h.
	Elective	3 s.h.
		32 s.h.

Second Year

15:109	Intro to Accounting	3 s.h.
	OR 15:118 Acctg. Procedures (3 s.h.)	
	OR 15:150 Acctg. Principles I (3 s.h.)	
15:142	Principles of Management.....	3 s.h.
15:175	Electronic Spreadsheets	3 s.h.
15:221	Marketing.....	3 s.h.
15:241	Human Relations.....	3 s.h.
40:125	Quantitative Methods	3 s.h.
	Elective in Humanities or Social Science	3 s.h.
	Elective ²	7 s.h.
		28 s.h.
	Total Hours	60 s.h.

¹ 40:121 or higher level math course

² Recommended electives

Elective Courses

15:110	Electronic Calculators.....	1 s.h.
15:144	Principles of Supervision	3 s.h.
15:149	Managing Human Resources.....	3 s.h.
15:151	Accounting Principles II	3 s.h.
15:171	Introduction to Entrepreneurship	3 s.h.
15:172	Managing the Entrepreneurial Venture ..	3 s.h.
15:173	Seminar in Entrepreneurship.....	3 s.h.
15:190	General Insurance.....	3 s.h.
15:210	Business Statistics	3 s.h.
15:222	Principles of Advertising	3 s.h.
15:223	Principles of Selling	3 s.h.
89:100	Cooperative Work Experience	2-5 s.h.
89:150	Employment Strategies	1 s.h.

General Business/Banking Option

This program is designed to help persons presently employed in banking to further their careers and to prepare students entering the job market for entry-level positions in banking and other financial firms. For specific placement information, contact the North Iowa Career Center or the NIACC Business Division.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree/General Business-Banking (see pages 200-203 for specific requirements). Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. degree (see pages 200-203). This will necessitate a slightly different curriculum.

Successful graduates can find job opportunities in the following occupational areas:

- * Commercial / Ag lender
- * Consumer Lending
- * Marketing Officer
- * Night Processor
- * Personal Banker
- * Proof Operator
- * Real Estate Lending
- * Retail Banking Officer
- * Teller
- * Teller Manager

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Principles I (3 s.h.)	
15:151 Accounting Principles II	3 s.h.
15:170 Principles of Banking Operation	3 s.h.
30:101 Communication Skills I.....	3-4 s.h.
30:102 Communication Skills II.....	3-4 s.h.
80:101 General Psychology	3 s.h.
80:133 Macroeconomics	3 s.h.
85:101 Public Speaking ¹	2 s.h.
Mathematics ²	3 s.h.
Electives.....	4-5 s.h.
	30-33 s.h.

Second Year

15:120 Business Law I	3 s.h.
15:121 Business Law II	3 s.h.
15:140 Intro to Computers and Information Systems.....	3 s.h.
15:241 Human Relations.....	3 s.h.
40:125 Quantitative Methods	3 s.h.
Elective in Humanities or Social Science.....	3 s.h.
Electives.....	9-12 s.h.
	27-30 s.h.
Total Hours	60 s.h.

Elective Courses

15:101 Introduction to Business	3 s.h.
15:107 Keyboarding for Office Technology	3 s.h.
15:110 Electronic Calculators.....	1 s.h.
15:112 Keyboarding Level I.....	1 s.h.
15:113 Keyboarding Level II.....	1 s.h.
15:142 Principles of Management.....	3 s.h.
15:171 Introduction to Entrepreneurship	3 s.h.
15:172 Managing the Entrepreneurial Venture	3 s.h.
15:173 Seminar in Entrepreneurship.....	3 s.h.
15:175 Electronic Spreadsheets	3 s.h.
30:120 Reading Improvement.....	3 s.h.
80:110 Sociology.....	3 s.h.
80:111 Social Problems	3 s.h.
80:120 Intro to American Government	3 s.h.
80:121 American, State and Local Government	3 s.h.
80:134 Microeconomics	3 s.h.
89:150 Employment Strategies	1 s.h.
90:105 Business Math.....	2 s.h.

¹ Not required if the student enrolls for Communication Skills (8 s.h.)

² 40:121 or higher level math course

Marketing and Sales

Diploma Program

Marketing and Sales is a 30-semester hour program designed to meet the needs of the adult who is attending classes primarily at night. Successful completion of the curriculum should make a graduate employable in sales and marketing. In addition, all the courses apply toward the two-year Associate in Science-Business degree.

Upon satisfactory completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCE REQUIREMENTS

High school graduation or equivalent.

Successful graduates can find job opportunities in the following occupational areas

- * Sales clerk
- * Sales representative
- * Management trainee

REQUIRED COURSES/SUGGESTED SCHEDULE

15:120 Business Law I	3 s.h.
15:142 Principles of Management.....	3 s.h.
15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Principles I (3 s.h.)	
15:221 Marketing.....	3 s.h.
15:222 Principles of Advertising	3 s.h.
15:223 Principles of Selling	3 s.h.
30:101 Communication Skills I (30:101C).....	3 s.h.
80:133 Macroeconomics	3 s.h.
85:101 Public Speaking OR	2 s.h.
85:105 Group Discussion (2 s.h.)	
Electives	4 s.h.
Total Hours	30 s.h.

Elective Courses

15:101 Intro to Business.....	3 s.h.
15:110 Electronic Calculators.....	1 s.h.
15:121 Business Law II	3 s.h.
15:134 Computer Applications	3 s.h.
15:140 Intro to Computers and Information Systems.....	3 s.h.
15:144 Principles of Supervision	3 s.h.
15:149 Managing Human Resources.....	3 s.h.
15:151 Accounting Principles II ¹	3 s.h.
15:171 Introduction to Entrepreneurship	3 s.h.
15:172 Managing the Entrepreneurial Venture ..	3 s.h.
15:173 Seminar in Entrepreneurship.....	3 s.h.
15:175 Electronic Spreadsheets	3 s.h.
15:241 Human Relations	3 s.h.
30:102 Communication Skills II (30:101C) ²	3 s.h.
80:134 Microeconomics	3 s.h.
89:100 Cooperative Work Experience	2-5 s.h.
Mathematics	3 s.h.

¹ Prerequisite Accounting Principles I

² Prerequisite Communication Skills I

Retail Management

Retail Management is a career program designed to prepare graduates for a career in the field of retailing. Graduates usually have retail management or business ownership as a personal career goal.

The retail program curriculum is a combination of classroom instruction and learning on the job. The classroom instruction focuses on basic business principles that business people need to know. It also teaches the basics of retailing. The retail field experience (on-the-job) provides the student the opportunity to apply the classroom learning on the job as well as learn from the employer. The retail field experience also allows the student to gain valuable work experience and build a resume while enrolled in college.

When the prescribed curriculum is completed with a grade point of 2.00 or above, the student is awarded an Associate in Applied Science Degree in Retail Management.

Successful graduates can find employment opportunities in the field of retailing which offers a wide assortment of job possibilities. Visit careersinretailing.com for examples of career opportunities. For specific placement information regarding this program, contact the NIACC Workforce Development Center or the program coordinator.

Program Entrance Requirements

Students planning on entering this program should complete a college application. They should be a high school graduate or the equivalent. It is strongly recommended that they meet with the program coordinator to discuss the program as it relates to their career goals.

SUGGESTED SCHEDULE

Semester One

15:101	Introduction to Business	3 s.h.
15:223	Principles of Selling	3 s.h.
90:105	Business Math	2 s.h.
90:125	Retailing	3 s.h.
90:123	Retail Field Experience	5 s.h.
		16 s.h.

Semester Two

15:134	Computer Applications	3 s.h.
15:212	Business Communication	3 s.h.
15:221	Marketing	3 s.h.
15:241	Human Relations	3 s.h.
90:126	Retail Field Experience	5 s.h.
		17 s.h.

Semester Three

15:109	Introduction to Accounting	3 s.h.
15:144	Principles of Supervision	3 s.h.
89:150	Employment Strategies	1 s.h.
90:233	Retail Field Experience	5 s.h.
	Elective	3 s.h.
		15 s.h.

Semester Four

15:120	Business Law I	3 s.h.
15:142	Principles of Management	3 s.h.
90:234	Retail Buying	3 s.h.
	Elective	3 s.h.
		12 s.h.
	Total Hours	60 s.h.

Retail Field Experience

The retail field experience portion of this curriculum is a very important part of the curriculum. Once a student has determined the program meets his/her educational needs, he/she should meet with the program coordinator as soon as possible to discuss the necessary employment.

The following list contains recommended electives based on the idea of strengthening a student's business expertise:

15:149	Managing Human Resources	3 s.h.
15:171	Introduction to Entrepreneurship	3 s.h.
15:172	Managing the Entrepreneurial Venture	3 s.h.
15:173	Seminar in Entrepreneurship	3 s.h.
15:175	Electronic Spreadsheets	3 s.h.
15:222	Principles of Advertising	3 s.h.
80:133	Macroeconomics	3 s.h.
80:134	Microeconomics	3 s.h.

While the above courses are recommended electives, other courses may be taken with the approval of the program coordinator.

Supervision and Management

Diploma Program

The Supervision and Management Diploma Program is designed to meet the needs of students who want a foundation in developing skills in the areas of supervising people and the overall management of a business enterprise.

Successful completion of the program will assist students in developing an awareness and understanding to organize, coordinate, and evaluate the functions of a unit, department, or branch of an organization either in an industrial management or administrative capacity.

All the courses taken in the diploma program apply to the Supervision and Management Career Option Program.

Upon satisfactory completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded a diploma. This recognition is granted to a person who has completed at least thirty (30) semester hours of credit.

Successful graduates can find job opportunities in the following occupational areas:

- * Supervisor clerks
- * Department supervisor
- * Supervisor, audit clerks
- * Supervisor, accounting
- * Supervisor, assembly stock
- * Supervisor, coding clerk

SUGGESTED SCHEDULE

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. I (3 s.h.)	
15:120 Business Law I	3 s.h.
15:140 Intro to Computers and Information Systems.....	3 s.h.
15:142 Principles of Management.....	3 s.h.
15:144 Principles of Supervision	3 s.h.
15:149 Managing Human Resources.....	3 s.h.
15:241 Human Relations.....	3 s.h.
30:101 Communication Skills I.....	4 s.h.
80:133 Macroeconomics	3 s.h.
Elective.....	3 s.h.
Total Hours	31 s.h.

Career Option

NIACC's Supervision and Management Program is designed to prepare graduates with interests in the area of supervising people and being part of the overall management of a business enterprise.

The intent of this program is to develop abilities to organize, coordinate, and evaluate the functions of a unit, department, or branch of an organization either in an industrial management or administrative management capacity.

Upon completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree/Supervision and Management.

Students in the Supervision and Management Career Option Program supplement the diploma program with the following additional courses:

REQUIRED COURSES/SUGGESTED SCHEDULE

15:121 Business Law II	3 s.h.
15:151 Accounting Principles II	3 s.h.
15:221 Marketing.....	3 s.h.
30:102 Communication Skills II	4 s.h.
40:121 Mathematics for Decision Making	3 s.h.
80:134 Microeconomics	3 s.h.
Social Science or Humanities Elective ...	3 s.h.
General Electives	7 s.h.
	29 s.h.
Total Hours	60 s.h.

Recommended electives:

15:171 Introduction to Entrepreneurship	3 s.h.
15:172 Managing the Entrepreneurial Venture ..	3 s.h.
15:173 Seminar in Entrepreneurship.....	3 s.h.
15:175 Electronic Spreadsheets	3 s.h.
89:100 Cooperative Work Experience, as arranged	

COURSE DESCRIPTIONS

**Financial Management/Insurance
General Business
General Business/Banking Option
Marketing and Sales
Retail Management
Supervision and Management
Diploma and Career Option**

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.) Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wam (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, producing, and proofreading documents: memos, letters, envelopes, tables and reports. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in a business. (45-0)

15:110 Electronic Calculators (1 s.h.) A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30) [Also Open Entry/Open Exit]

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Open Entry/Open Exit

15:110 Electronic Calculators (1 s.h.) [Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30)

15:112 Keyboarding Level I (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. This course covers the development of keyboarding techniques using the touch method on the computer to learn/review the alphabetic keys. The keyboarding goal is a minimum rate of 20 words a minute with 3 or less errors. Students with little or no keyboarding skill would begin at this level. (0-30)

15:113 Keyboarding Level II (1 s.h.) [Open Entry/Open Exit] Prerequisite: Keyboarding Level I OR ability to keyboard at 20 words a minute. This course covers the development of the touch method on the computer keyboard to learn/review the alphabetic, numeric, and symbol keys. The keyboarding goal is a minimum rate of 30 words a minute with 3 or less errors. (0-30)

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15:118 Accounting Procedures (3 s.h.) An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers, the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:119 Accounting Applications (5 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles with a grade of "C" or above. A continuation of Accounting Procedures including voucher system, partnerships, and corporations. Includes completion of an accounting simulation project. (75-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:121 Business Law II (3 s.h.) Prerequisite: 15:120, Business Law I, or permission of the instructor. A continuation of 15:120. Agency, corporations, partnerships, bailments, real property, wills, trusts, insurance, bankruptcy, and government regulation of business. Some information on international law and liability of accountants. (45-0)

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, data base management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:142 Principles of Management (3 s.h.) Prerequisite: 15:101, Introduction to Business, is recommended. Provides students with a general introductory management learning experience. Role of management in today's business environment; management's influence on employee productivity, employee satisfaction and organizational effectiveness; and, major control devices of management. (45-0)

15:144 Principles of Supervision (3 s.h.) This course is designed for individuals who hold, or who will hold, supervisory positions. The course involves the study of the major managerial functions (planning, organizing, staffing, directing, and controlling) and is augmented by other pervasive areas of supervision such as communication, motivation, decision making, and human relations. (45-0)

15:149 Managing Human Resources (3 s.h.) Course describes the transition from personnel management to human resources management. The focus is on the

systematic process of recruitment, selection, developing, and appraising employees. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:151 Accounting Principles II (3 s.h.) Prerequisite: 15:150, Accounting Principles I, or equivalent. Course covers Statement of Cash Flows, financial statement analysis, job order and process cost systems, cost behavior, budgeting, standard costing, differential analysis and product pricing, capital investment analysis, activity-based costing, and just-in-time manufacturing. Emphasis is on management's use of accounting information. (45-0)

15:160 Computer Accounting (3 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles I with a grade of "C" or above. Designed to provide students with realistic experience with automated accounting consisting of five systems: general ledger, accounts payable, accounts receivable, depreciation, and payroll. Students will find themselves as having taken an accounting position in a company already using a computerized accounting system. Students will be working in an individualized instruction environment. (45-0)

15:170 Principles of Banking (3 s.h.) Fundamental bank functions presented in a descriptive fashion so that the beginning banker may view the profession in a broad (and operational) perspective. (45-0)

15:171 Introduction to Entrepreneurship (3 s.h.) Prerequisite: 15:101, Introduction to Business. This course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:172 Managing the Entrepreneurial Venture (3 s.h.) 15:101, Introduction to Business, or 15:171, Introduction to Entrepreneurship, are recommended. The course provides students with the tools necessary to manage and grow a small business. Students will examine the characteristics of successful small businesses and develop insights on developing strategies for successfully growing existing ventures. Students will also learn the process of evaluating the marketing and financial needs of the venture and understand the components of a business plan. (45-0)

15:173 Seminar in Entrepreneurship (3 s.h.) Prerequisite: 15:171, Introduction to Entrepreneurship, and 15:172, Managing the Entrepreneurial Venture. Course

will combine group discussions with an actual case project at a local entrepreneurial firm. Students will have an opportunity to apply business skills learned throughout their NIACC program as they complete a project for a local entrepreneurial venture. Students also will discover key entrepreneurial success characteristics. (38-15)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computer and Information Systems or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, data bases, and business graphics using appropriate software. (30-30)

15:190 General Insurance (3 s.h.) Principles of insurance and risk, including personal and business viewpoints in regard to life, health, property, and liability risks. (45-0)

15:195 Property and Casualty Insurance (3 s.h.) This course is designed to provide instruction that will provide a high level of understanding of property and casualty insurance. Topics covered will include fire, homeowners, dwelling, auto, business and professional liability, crime and fidelity, workers' compensation, and applications from a personal and commercial perspective. (45-0)

15:200 Life, Health, and Disability Insurance (3 s.h.) Prerequisite: 15:190, General Insurance. This course is designed to provide instruction in a variety of areas giving the student a good understanding of life insurance, health insurance, and the role and application within the industry. (45-0)

15:210 Business Statistics (3 s.h.) Prerequisite: 40:125, Quantitative Methods; 40:140, Intro to Statistics; or 40:151, College Algebra & Trig I. The use of statistical methods as an analytical tool in business situations. Data collection, tabular and graphical presentations, frequency distributions, probability, sampling, data analysis, hypothesis testing and regression, and correlation analysis. The use of statistical software is incorporated into the course. (45-0)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters, interoffice memorandums, and informal business reports. A secondary emphasis will be placed on oral communication, listening skills, nonverbal communication, and international communication. (45-0)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:222 Principles of Advertising (3 s.h.) Principles and practices in commonly used advertising media. (45-0)

15:223 Principles of Selling (3 s.h.) This course is centered around the study of concepts and practices used by professional salespeople in today's market-driven economy. The course also includes a study of selling as a promotional strategy used by marketers. (45-0)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:101C Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102C Communication Skills II (3 s.h.) Prerequisite: 30:101C, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos.

Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:120 College Reading Skills (3 s.h.) Designed to help students become more efficient and effective in reading college textbooks, required materials, career resources, and leisure articles and books. Course adapts to the style and needs of each individual to improve vocabulary, comprehension, rate, and study skills. (45-0)

40:121 Mathematics for Decision Making (3 s.h.) Prerequisite: Basic Arithmetic and Algebra skills as shown by one of the following: 1. A score of 16 or higher on the ACT Math Test or the ASSET Numerical Math Skills Test, or a score of 51 or higher on the Pre-Algebra part of the COMPASS Test AND a grade of "C" or better in 40:060, Beginning Algebra (at NIACC) or equivalent; 2. A score of 20 or higher on the ACT Math Test or the ASSET Numerical Math Skills Test or 51-75 on the Algebra section of the COMPASS test. Mathematics for Decision Making provides a survey of mathematics topics that includes sets, logic, probability, statistics, sets of numbers, algebra, geometry, and consumer math. This course will fulfill 3 hours of Natural Sciences requirement for the A.A. Degree. (45-0)

40:125 Quantitative Methods (3 s.h.) Prerequisite: Two years of high school algebra with a "C" or higher or 40:120, Intermediate Algebra, with a "C" or higher. Furnishes the student with the mathematics required for an understanding of various quantitative methods used in business. Set theory, linear programming, matrices, probability, linear systems, and applications. (45-0)

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to enroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:110 Sociology (3 s.h.) An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

80:111 Social Problems (3 s.h.) Prerequisite: 80:110, Sociology, is strongly recommended. Introduction to the study of contemporary social problems. The course examines how social problems are identified, explores underlying conditions and causes of social problems, and considers possible solutions and policy implications. Emphasis is on sociological and critical thinking frameworks. Topics of exploration include: mental illness, substance abuse, crime, prejudice and discrimination, prostitution, and poverty. (45-0)

80:120 Introduction to American Government (3 s.h.) A survey of the American federal system of government including a description and analysis of the constitution, the legislative, executive, and judicial branches of government, and the American political process. (45-0)

80:121 American State and Local Government (3 s.h.) A survey of state and local governments in the United States including an analysis of federal-state relations, state constitutions, state and local legislative, executive, and judicial systems, and major issues in state and local politics. (45-0)

80:133 Macroeconomics (3 s.h.) An introductory study of how people use scarce resources to satisfy their many material wants and needs. The emphasis is on the determination of national income, output, employment and prices, and the role of the money and banking system in a market economy. (45-0)

80:134 Microeconomics (3 s.h.) Prerequisite: 80:133, Macroeconomics. Requires knowledge of basic high school algebra or its equivalent. Analysis of individual consumer and firm behavior, theories of production and consumption, pricing and the market system, perfect and imperfect competition, business and labor regulation, market structure, international trade and finance, current economic problems. (45-0)

85:101 Public Speaking (2 s.h.) Public speaking as an intellectual tool for use in argumentation and persuasion in a democratic society. (30-0)

85:105 Group Discussion (2 s.h.) Principles and techniques of group discussion methods and procedures based on parliamentary methods. (30-0)

89:100 B-C-D-E Cooperative Work Experience (2-5 s.h.) Practical training on the job under the cooperative supervision of the college and work supervisor. Designed primarily for the college-transfer students to provide an experience that: (1) is directly related to their college program and career objectives; or (2) will help them test out career interest and/or discover new career possibilities. Credit is determined on the basis of one semester of credit for each 60 hours of approved employment to be completed in a term. Appropriateness of learning objectives is an essential factor in the approval process. This course is repeatable up to 12 semester hours. (15-285)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:105 Business Math (2 s.h.) Basic mathematical skills necessary in an accounting situation. Includes basic mathematical principles, percentages, interest, and mechanics of handling daily monetary activities. (30-0)

90:123 Retail Field Experience (5 s.h.) The on-the-job training component of the Retail Management Program. (15-225)

90:125 Retailing (3 s.h.) The study of the selling of goods and services to ultimate consumers, involving distribution, inventory control, site selection, pricing, and other topics pertinent to successful retail business operations. (45-0)

90:126 Retail Field Experience (5 s.h.) Prerequisite: 90:123, Retail Field Experience, or equivalent work experience. The on-the-job training component of the Retail Management Program. (15-225)

90:233 Retail Field Experience (5 s.h.) Prerequisite: 90:123 and 90:126, Retail Field Experience, or equivalent work experience. The on-the-job training component of the Retail Management Program. (15-225)

90:234 Retail Buying Fundamentals (3 s.h.) Buying duties and policies, how to buy, how much to buy, buying methods, source selection, price lines, and sales records. Product knowledge and analysis relative to the buying function and value analysis of products. (30-30)

90:237 Retail Field Experience (5 s.h.) Prerequisite: 90:123, 90:126, and 90:233, Retail Field Experience, or equivalent work experience. The on-the-job training component of the Retail Management Program. (15-225)

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

Quotable Quote:

Life is not a "brief candle." It is a splendid torch that I want to make burn as brightly as possible before handing it on to future generations.

-Bernard Shaw

OFFICE TECHNOLOGY

Degree Programs

- Administrative Secretary**
- Administrative Medical Secretary**
- Administrative Medical Secretary /
Transcription Specialist Option**
- Administrative Legal Secretary**

Diploma Programs

- General Secretary**
- Legal Secretary**
- Medical Secretary**
- Medical Transcription**

OFFICE TECHNOLOGY

Office Technology Programs provide for a rapidly changing occupational cluster. Employment opportunities are available for graduates with well-developed “people and technical skills.”

NIACC’s Office Technology Programs are dual-purpose programs designed to give the student the option of obtaining employment upon graduation or transferring to a four-year institution.

Upon the completion of the curriculum with a grade point average of 2.00 (C), the student is awarded an associate degree (see pages 200-203 for specific degree requirements).

Students who know they want to pursue a four-year degree and want to meet general education requirements at transfer institutions should pursue the A.A. degree (see pages 200-203).

Administrative Secretary - Degree

The Administrative Secretary Degree Program is designed to prepare students for employment with financial institutions, retail establishments, manufacturers, private organizations, and Civil Service.

The graduate's duties include: transcribing dictation; keyboarding correspondence, reports, and records; filing; handling telephone services; making appointments and receiving visitors; ordering supplies; making travel arrangements; taking care of general office administration; and using computers for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 60 semester hours) with an average grade point of 2.00 (C), the student is awarded an Associate in Science Business Degree/Administrative Secretary.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- | | |
|-----------------------|-------------------------------------|
| * Executive secretary | * Administrative assistant |
| * Records manager | * Receptionist |
| * Office manager | * Information processing supervisor |

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

First Term

15:107*	Keyboarding for Office Technology	.....3 s.h.
15:109	Intro to Accounting	.....3 s.h.
	OR 15:118 Acctg. Procedures (3 s.h.)	
	OR 15:150 Acctg. Prin. (3 s.h.)	
15:110	Electronic Calculators	.....1 s.h.
30:101	Communication Skills I	.....4 s.h.
	Humanities Elective OR	
	Social Science	..... 3 s.h.
		14 s.h.

*Prerequisite: 15:112, 15:113 OR ability to pass keyboarding test 30 wam with 3 errors or less

Second Term

15:211	Word Processing	.....2 s.h.
30:102	Communication Skills II	.....4 s.h.
	Business Electives	.....10 s.h.
		16 s.h.

Second Year

First Term

15:134	Computer Applications	.....3 s.h.
	OR 15:140 Intro to Computers and Information Systems (3 s.h.)	
15:212	Business Communication	.....3 s.h.
	Humanities Elective	.....3 s.h.
	Social Science Elective	.....3 s.h.
	Business Electives	.....4 s.h.
		16 s.h.

Second Term

15:136*	Advanced Document Processing	.....3 s.h.
15:175**	Electronic Spreadsheets	.....3 s.h.
15:218***	Professional Office Procedures	.....4 s.h.
89:150	Employment Strategies	.....1 s.h.
	Natural Science Elective	.....3 s.h.
		14 s.h.

* Prerequisites: 15:211 and 15:134 or 15:140

** Prerequisites: 15:134 or 15:140

***Prerequisites: 15:211 and 15:212

Recommended electives

15:101	Intro to Business	.....3 s.h.
15:142	Principles of Management	.....3 s.h.
15:221	Marketing	.....3 s.h.
15:241	Human Relations	.....3 s.h.
15:280	On-the-Job Training	.....1-6 s.h.

Students have the opportunity to focus on courses that will be most appropriate to help prepare them for employment. However, each student should seek the advice of the program coordinator and/or the student's advisor in making course selections.

Administrative Medical Secretary - Degree

The Administrative Medical Secretary Degree Program is designed to prepare students for employment in physicians' offices, hospitals, clinics, public health departments, Civil Service, medical laboratories, pharmaceutical houses, insurance companies, business and industrial firms with large medical departments, and foundations devoted to medical research.

The graduate's duties include preparing correspondence and medical records, filing, mailing, ordering supplies, handling telephone services, making appointments and receiving visitors, taking care of general office administration, and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 60 semester hours) with an average grade point of 2.00 (C), the student is awarded an Associate in Science - Medical Secretary Degree.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Medical secretary
- * Appointment clerk
- * Receptionist
- * Medical records manager
- * Medical information processing operator

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

First Term

- 15:107* Keyboarding for Office Technology3 s.h.
- 15:109 Intro to Accounting3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)
OR 15:150 Acctg. Prin. (3 s.h.)
- 15:110 Electronic Calculators.....1 s.h.
- 30:101 Communication Skills I4 s.h.
- 94:104 Body Structure & Function4 s.h.
OR 70:111 Human Biology (4 s.h.)

15 s.h.

*Prerequisite: 15:112, 15:113 OR ability to pass keyboarding test at 30 wpm with 3 errors or less

Second Term

- 15:134 Computer Applications3 s.h.
OR 15:140 Introduction to Computers and Information Systems (3 s.h.)
 - 15:211 Word Processing2 s.h.
 - 30:102 Communication Skills II4 s.h.
 - 70:101 Biological Principles3 s.h.
 - 70:102L Biological Principles Lab1 s.h.
 - Electives3 s.h.
- 16 s.h.**

Second Year

First Term

- 15:175* Electronic Spreadsheets3 s.h.
 - 15:212 Business Communication.....3 s.h.
 - 15:251 Medical Terminology I3 s.h.
 - Electives6 s.h.
- 15 s.h.**

*Prerequisite: 15:134 or 15:140

Second Term

- 15:136*Advanced Document Processing.....3 s.h.
 - 15:250**Basic Medical Insurance & Coding....2 s.h.
 - 15:252 Medical Terminology II3 s.h.
 - 15:259***Medical Office Procedures.....3 s.h.
 - 89:150 Employment Strategies1 s.h.
 - 90:134 Pharmacology2 s.h.
- 14 s.h.**

*Prerequisites: 15:134 OR 15:140 and 15:211

**Prerequisite: 94:104 or permission from instructor and 15:251

***Prerequisites: 15:211 and 15:212

Recommended Electives

- 15:142 Principles of Management.....3 s.h.
- 15:241 Human Relations.....3 s.h.
- 15:280 On-the-Job Training1-6 s.h.
- 70:250 Anatomy and Physiology I.....4 s.h.
- 90:141 Clinical Procedures I and Lab4 s.h.

Students have the opportunity to focus on courses that will be most appropriate to help prepare them for employment. However, each student should seek the advice of the program coordinator and/or the student's advisor in making course selections.

Administrative Medical Secretary Degree Transcription Specialist Option

The Administrative Medical Secretary Degree Transcription Specialist Program is designed to prepare students for employment in physicians' offices, hospitals, clinics, public health departments, Civil Service, medical laboratories, pharmaceutical houses, insurance companies, business and industrial firms with large medical departments, and foundations devoted to medical research.

The transcription specialist's duties primarily include transcribing medical documents and preparing correspondence and medical records; other secretarial duties include filing, mailing, ordering supplies, handling telephone services, making appointments and receiving visitors, taking care of general office administration, and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the field. Upon satisfactory completion of the prescribed curriculum (at least 60 semester hours) with an average grade point of 2.00 (C), the student is awarded an Associate in Science Degree/Medical Secretary with a Transcription Specialist Certificate.

ENTRANCE REQUIREMENTS

High School graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

First Term

15:107* Keyboarding for Office Technology	3 s.h.
15:211 Word Processing	2 s.h.
15:251 Medical Terminology I	3 s.h.
30:101 Communication Skills I	4 s.h.
94:104 Body Structure and Function	4 s.h.
OR 70:111 Human Biology (4 s.h.)	

16 s.h.

*Prerequisite: 15:112, 15:113 OR ability to pass keyboarding test at 30 wpm with 3 errors or less.

Second Term

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
15:249 Medical Transcription I	3 s.h.
15:252 Medical Terminology II	3 s.h.
30:102 Communication Skills II	4 s.h.
90:140 Lab Tests.....	1 s.h.

15 s.h.

Second Year

First Term

15:134 Computer Applications	3 s.h.
OR 15:140 Introduction to Computers and Information Systems (3 s.h.)	
15:212 Business Communication	3 s.h.
15:256* Medical Transcription II	3 s.h.
70:250 Anatomy and Physiology I.....	4 s.h.
89:150 Employment Strategies	1 s.h.

14 s.h.

*Prerequisites: 15:249

Second Term

15:175***Electronic Spreadsheets.....	3 s.h.
15:250* Basic Medical Insurance and Coding	2 s.h.
15:259***Medical Office Procedures	3 s.h.
15:265**Medical Transcription III	3 s.h.
90:134 Pharmacology	2 s.h.
Electives (Strongly recommend	2 s.h.
70:251***** OR Anatomy and Physiology II, 4 s.h.)	

15 s.h.

*Prerequisites: 94:104/70:101/70:250 or permission from instructor and 15:251

**Prerequisites: 15:249

***Prerequisites: 15:211 and 15:212

****Prerequisites: 15:134 OR 15:140

*****Strongly recommend prerequisite 70:250

Summer Term:

Strongly recommend taking 90:147, Pathophysiology as your elective from Second Year, Second Term. This course is only offered in the summer session. Prerequisites: 15:251 and 70:250; corequisite 70:251.

Administrative Legal Secretary - Degree

The Administrative Legal Secretary Degree Program is designed to prepare students for employment in law offices, insurance companies, financial institutions, courts, and police departments as well as in legal departments of business firms and government offices.

The graduate's duties include preparing letters, memos, court and client documents; filing; handling telephone services; making appointments and receiving clients; ordering supplies; making travel arrangements; taking care of general office administration, and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 60 semester hours) with an average grade point of 2.00 (C), the student is awarded an Associate in Science Business Degree/Administrative Legal Secretary.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Legal secretary
- * Legal transcriber
- * Legal information processing operator
- * Receptionist
- * Legal records manager
- * Appointment clerk

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

First Term

15:107* Keybrdng for Office Technology	3 s.h.
15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
30:101 Communication Skills I	4 s.h.
80:120 Intro to American Government	3 s.h.
	14 s.h.

*Prerequisite: 15:112, 15:113 OR ability to pass keyboarding test at 30 wpm with 3 errors or less

Second Term

15:211 Word Processing	2 s.h.
30:102 Communication Skills II	4 s.h.
Social Science/Humanities Electives	6 s.h.
Business Elective	3 s.h.
	15 s.h.

Second Year

First Term

15:120 Business Law I	3 s.h.
15:134 Computer Applications	3 s.h.
OR 15:140 Introduction to Computers	
and Information Systems (3 s.h.)	
15:212 Business Communication	3 s.h.
Natural Science Elective	3 s.h.
Business Elective	3 s.h.
	15 s.h.

Second Term

15:122* Legal Office Procedures	5 s.h.
15:136** Advanced Document Processing	3 s.h.
15:175*** Electronic Spreadsheets	3 s.h.
89:150 Employment Strategies	1 s.h.
Business Electives	4 s.h.
	16 s.h.

*Prerequisites: 15:211 and 15:212

**Prerequisites: 15:211 and 15:134 OR 15:140

***Prerequisite: 15:134 or 15:140

Recommended Electives

15:101 Introduction to Business	3 s.h.
15:121 Business Law II	3 s.h.
15:142 Principles of Management.....	3 s.h.
15:241 Human Relations	3 s.h.
15:280 On-the-Job Training	1-6 s.h.

Students have the opportunity to focus on courses that will be most appropriate to help prepare them for employment. However, each student should seek the advice of the program coordinator and/or his/her advisor in making course selections.

Quotable Quote:

Just don't give up trying to do what you really want to do. Where there's love and inspiration, I don't think you can go wrong.

-Ella Fitzgerald, American Singer

**COURSE DESCRIPTIONS -
(Degree Programs)**

**Administrative Secretary
Administrative Legal Secretary
Administrative Medical Secretary/
Transcription Specialist Option**

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.) Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wam (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, producing, and proofreading documents: memos, letters, envelopes, tables and reports. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in a business. (45-0)

15:110 Electronic Calculators (1 s.h.) A study of the ten-key, electronic calculator. Applied business problems on the calculator. (0-30) [Also Open Entry/Open Exit]

* * * * *

Open Entry/Open Exit

15:110 Electronic Calculators (1 s.h.) [Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30)

* * * * *

15:118 Accounting Procedures (3 s.h.) An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers, the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:121 Business Law II (3 s.h.) Prerequisite: 15:120, Business Law I, recommended. A continuation of 15:120. Agencies, corporations, partnerships, bailments, real property, wills, trusts, insurance, bankruptcy, and government regulation of business. Some information on international law and liability of accountants. (45-0)

15:122 Legal Office Procedures (5 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a lawyer's office that includes topics covering general legal documents, personal and real property, business organizations and meetings, bankruptcies, wills and estates, civil cases, and family law. Includes using a word processor, developing transcription skills, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (60-30)

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. (30-30)

15:136 Advanced Document Processing (3 s.h.) Prerequisites: 15:134, Computer Applications, and 15:211, Word Processing. Students will learn intermediate to advanced functions of Microsoft Word including customizing templates, recording macros, creating on-screen forms, managing long documents, creating hyperlinks, and publishing on the World Wide Web. Upon completion of the course, the students may be prepared to take the MOUS (Microsoft Office User Specialist) expert exam for Microsoft Word 2000. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, data base management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:142 Principles of Management (3 s.h.) Prerequisite: 15:101, Introduction to Business, is recommended. Provides students with a general introductory management learning experience. Role of management in today's business environment; management's influence on employee productivity, employee satisfaction and organizational effectiveness; major control devices of management. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, data bases, and business graphics using appropriate software. (30-30)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters, interoffice memorandums, and informal business reports. A secondary emphasis will be placed on oral communication, listening skills, and nonverbal communication. (45-0)

15:218 Professional Office Procedures (4 s.h.) Prerequisite: 15:211, Word Processing and 15:212, Business Communication. Office procedures and techniques necessary to perform general office duties. Includes using a word processor, developing transcription skills, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (40-30)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts and promotional activities that are used in business today. (45-0)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

15:249 Medical Transcription I (3 s.h.) This course is designed to simulate medical transcription practices used in a healthcare environment. The main objective is to provide the student with knowledge of the content and formats of medical documents and reports typically dictated in physicians' offices, hospital clinics, and hospital ancillary and support facilities. (15-60)

15:250 Basic Medical Insurance and Coding (2 s.h.) Prerequisite: 15:251, Medical Terminology I, and 94:104, Body Structure and Function. This course will provide the students with an overview of medical health insurance claims, submission guidelines, and basic coding procedures. In addition, the student will work through a number of relevant case studies. (30-0)

15:251 Medical Terminology I (3 s.h.) A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

15:252 Medical Terminology II (3 s.h.) Prerequisite: None. However, 15:251, Medical Terminology I is highly desirable. A continuation of 15:251. To be taken concurrently with 70:251, Anatomy & Physiology, by those in the Medical Secretary curriculum. A brief review of basic medical terminology followed by a systems approach to learning terms associated with the anatomical, physiological, and pathological aspects of the body. Classifications of associated pharmaceutical agents are studied with each related system. (45-0)

15:256 Medical Transcription II (3 s.h.) Prerequisite 15:249, Medical Transcription I. This course is designed to introduce students to hospital dictation. The students will progress through various levels of dictation including some advanced documents. (15-60)

15:259 Medical Office Procedures (3 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a medical office that includes preparing correspondence and patient records, filing, handling telephone services, making and keeping appointments, developing transcription skills, composing letters, discussing professionalism, applying grammar rules, and taking care of general office duties. Also includes medical ethics and etiquette, medical law, and use of a computer for word processing. Students are expected to spend time outside of class working in the computer lab. (30-30)

15:265 Medical Transcription III (3 s.h.) Prerequisites: 15:249, Medical Transcription I. This course is designed to introduce students to live medical dictation from the clinical and radiology settings. The students will also be applying the issues of confidentiality and using medical reference books. (15-60)

15:280 On-the-Job Training (1-6 s.h.) On-the-Job Training is designed to provide a student an opportunity to apply his/her skills in a job setting. The On-the-Job experience is coordinated with an identified school coordinator and on-site sponsor. This is repeatable credit for a maximum of 6 hours. (0-180)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

70:101 Biological Principles (3 s.h.) Study of organismic biology including organization, metabolism, and reproduction of living systems. Includes evolutionary patterns, inheritance, growth, development, ecosystems, and structure-function relationships among organisms. (45-0)

70:102L Biological Principles Laboratory (1 s.h.) Prerequisite: Credit for 70:101 or current enrollment in 70:101. (0-30)

70:111 Human Biology (4 s.h.) Course provides overview of human biology for nonscience majors. Includes study of cells, tissues, organs, and systems with emphasis on interrelatedness. Coverage also includes genetics, aging, human ecology, and aspects of various human diseases. (45-30)

70:250 Anatomy and Physiology I (4 s.h.) Prerequisite: 70:111, Human Biology or 70:101, Biological Principles, highly recommended. A study of the human body emphasizing the complementary nature of structure and function, molecular and cellular interactions, homeostasis, and metabolic processes. A cat dissection constitutes a major portion of the laboratory exercises. 70:250 includes a study of cells, tissue, membranes, skeletal, muscular, and reproductive systems. (45-30)

70:251 Anatomy and Physiology II (4 s.h.) Prerequisite: Successful completion of 70:250, Anatomy and Physiology I, strongly recommended. A continuation of 70:250, Anatomy and Physiology I. Includes a study of the circulatory, respiratory, digestive, endocrine, and nervous systems. Cat dissections continued, plus kidney, brain, and eye dissections. (45-30)

80:120 Introduction to American Government (3 s.h.) A survey of the American federal system of government including a description and analysis of the constitution, the legislative, executive and judicial branches of government, and the American political process. (45-0)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:134 Basic Pharmacology (2 s.h.) Provides a basic foundation of the study of drugs including general concepts, biological factors affecting the action of drugs, and effects of medications on body systems. Includes

allergy overview, the medication order, and discussion of legal and ethical issues related to pharmacology. (30-0)

90:140 Laboratory Tests (1 s.h.) To familiarize the student with lab tests and their normal ranges in the areas of hematology, urology, and microbiology. (15-0)

90:141 Clinical Procedures I (4 s.h.) Assist physician with examinations and treatments, prepare patients for examinations and diagnostic procedures, administer first aid and CPR, maintain and use aseptic techniques, obtain and record patient data. Perform routine tests, sterilize instruments, and learn related terminology. (45-30)

90:147 Pathophysiology (3 s.h.) Prerequisite: 15:251, Medical Terminology I; 70:250, Anatomy & Physiology I; and Corequisite: 70:251, Anatomy & Physiology II. Presents clinical disorders and diseases commonly treated in physical therapy. Pathology, etiology, diagnosis, signs, symptoms, and prognosis will be covered. (45-0)

94:104 Body Structure and Function (4 s.h.) A basic study of the anatomy and physiology of the human body. Study progresses from the cell to tissues, organs and systems with emphasis on their interrelatedness. Discussion includes some of the alterations which occur in illness. Usage of applicable medical terminology is stressed. (45-30)

General Secretary - Diploma

The General Secretary Program is designed to prepare students for employment with financial institutions, retail establishments, manufacturers, private organizations, and Civil Service.

The graduate's duties include keyboarding, filing, record keeping, operating office machines, transcribing, using a computer for word processing, handling telephone services, and taking care of general office administration.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 30 semester hours) with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Secretary
- * Records manager
- * Machine transcriber
- * Receptionist
- * Information processing operator

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:107* Keybrng for Office Technology.....	3 s.h.
15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
15:134 Computer Applications	3 s.h.
OR 15:140 Intro to Computers and	
Information Systems (3 s.h.)	
15:211 Word Processing	2 s.h.
15:212 Business Communication.....	3 s.h.
	15 s.h.

*Prerequisite: 15:112, 15:113, OR ability to pass keyboarding test at 30 wam with 3 errors or less

Second Term

15:175* Electronic Spreadsheets	3 s.h.
15:218**Professional Office Procedures.....	4 s.h.
89:150 Employment Strategies	1 s.h.
Business Electives	7 s.h.
	15 s.h.

*Prerequisite: 15:134 or 15:140

**Prerequisites: 15:211 and 15:212

Recommended Electives

15:101 Introduction to Business	3 s.h.
15:136 Advanced Document Processing	3 s.h.
15:241 Human Relations.....	3 s.h.
15:280 On-the-Job Training	3 s.h.

Legal Secretary - Diploma

The Legal Secretary Program is designed to prepare students for employment with law offices, insurance companies, financial institutions, courts and police departments, as well as in legal departments of business firms and government offices.

The graduate's duties include preparing letters, memos, court and client documents; filing; handling telephone services; making appointments and receiving clients; ordering supplies; making travel arrangements; taking care of general office administration; and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 30 semester hours) with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Legal secretary
- * Legal transcriber
- * Appointment clerk
- * Receptionist
- * Legal records manager
- * Legal information processing operator

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:107* Keybrng for Office Technology.....	3 s.h.
15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
15:134 Computer Apps.	3 s.h.
OR 15:140 Intro to Computers and	
Information Systems (3 s.h.)	
15:211 Word Processing	2 s.h.
15:212 Business Communication	3 s.h.
	15 s.h.

*Prerequisite: 15:112, 15:113, OR ability to pass keyboarding test at 30 wam with 3 errors or less

Second Term

15:120 Business Law I	3 s.h.
15:122* Legal Office Procedures.....	5 s.h.
89:150 Employment Strategies	1 s.h.
Elective.....	6 s.h.
	15 s.h.

*Prerequisites: 15:211 and 15:212

Recommended Electives

15:101 Introduction to Business	3 s.h.
15:136 Advanced Document Processing	3 s.h.
15:175 Electronic Spreadsheets	3 s.h.
15:241 Human Relations.....	3 s.h.
15:280 On-the-Job Training	1-6 s.h.

Medical Secretary - Diploma

The Medical Secretary Diploma Program is designed to prepare students for employment in physicians' offices, hospitals, clinics, public health departments, Civil Service, medical laboratories, pharmaceutical houses, insurance companies, business and industrial firms with large medical departments, and foundations devoted to medical research.

The graduate's duties include preparing correspondence and medical records, filing, mailing, ordering supplies, handling telephone services, making appointments and receiving visitors, taking care of general office administration, and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 30 semester hours) with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Medical secretary
- * Appointment clerk
- * Medical records manager
- * Receptionist
- * Medical information processing operator

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:107* Keybrdng for Office Technology	3 s.h.
15:211 Word Processing	2 s.h.
15:212 Business Communication	3 s.h.
15:251 Medical Terminology I	3 s.h.
94:104 Body Structure & Function	4 s.h.
	15 s.h.

*Prerequisite: 15:112, 15:113 OR ability to pass keyboarding test at 30 wam with 3 errors or less

Second Term

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
15:250* Basic Medical Insurance and Coding	2 s.h.
15:252 Medical Terminology II	3 s.h.
15:259**Medical Office Procedures	3 s.h.
89:150 Employment Strategies	1 s.h.
90:134 Pharmacology	2 s.h.
	15 s.h.

*Prerequisites: 15:211 and 15:212

**Prerequisites: 94:104 and 15:251

Medical Transcription - Diploma

The Medical Transcription Diploma Program is designed to prepare students for employment in physicians' offices, hospitals, clinics, public health departments, Civil Service, medical laboratories, pharmaceutical houses, insurance companies, business and industrial firms with large medical departments, and foundations devoted to medical research.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the field.

Upon satisfactory completion of the prescribed curriculum (at least 30 semester hours) with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent. Keyboarding speed of at least 45 words per minute with no more than two errors.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:249 Medical Transcription I	3 s.h.
15:211 Word Processing	2 s.h.
15:212 Business Communication	3 s.h.
15:251 Medical Terminology I	3 s.h.
94:104 Body Structure and Function.....	4 s.h.
OR 70:111 Human Biology (4 s.h.)	
	15 s.h.

Second Term

15:252 Medical Terminology II	3 s.h.
15:256* Medical Transcription II	3 s.h.
15:265* Medical Transcription III	3 s.h.
90:140 Lab Tests.....	1 s.h.
90:134 Pharmacology	2 s.h.
Electives (Strongly recommend.....)	4 s.h.
70:111 Human Biology or	
70:250 Anatomy & Physiology I)	
	16 s.h.

*Prerequisites: 15:249

COURSE DESCRIPTIONS - Diploma Programs

General Secretary
Legal Secretary
Medical Secretary
Medical Transcription

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.)
Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wam (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, producing, and proofreading documents: memos, letters, envelopes, tables and reports. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in a business. (45-0)

15:110 Electronic Calculators (1 s.h.) A study of the ten-key, electronic calculator. Applied business problems on the calculator. (0-30) [Also Open Entry/Open Exit]

* * * * *

Open Entry/Open Exit

15:110 Electronic Calculators (1 s.h.) [Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30)

* * * * *

15:118 Accounting Procedures (3 s.h.) An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers, the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:122 Legal Office Procedures (5 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a lawyer's office that includes topics covering general legal documents, personal and real property, business organizations and meetings, bankruptcies, wills and estates, civil cases, and family law. Includes using a word processor, devel-

oping transcription skills, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (60-30)

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. (30-30)

15:136 Advanced Document Processing (3 s.h.)
Prerequisites: 15:134, Computer Applications, and 15:211, Word Processing. Students will learn intermediate to advanced functions of Microsoft Word including customizing templates, recording macros, creating on-screen forms, managing long documents, creating hyperlinks, and publishing on the World Wide Web. Upon completion of the course, the students may be prepared to take the MOUS (Microsoft Office User Specialist) expert exam for Microsoft Word 2000. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, data base management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, data bases, and business graphics using appropriate software. (30-30)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters, interoffice memorandums, and informal business reports. A secondary emphasis will be placed on oral communication, listening skills, and nonverbal communication. (45-0)

15:218 Professional Office Procedures (4 s.h.) Prerequisite: 15:211, Word Processing and 15:212, Business Communication. Office procedures and techniques necessary to perform general office duties. Includes using a word processor, developing transcription skills, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (45-30)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

15:249 Medical Transcription I (3 s.h.) This course is designed to simulate medical transcription practices used in a healthcare environment. The main objective is to provide the student with knowledge of the content and formats of medical documents and reports typically dictated in physicians' offices, hospital clinics, and hospital ancillary and support facilities. (15-60)

15:250 Basic Medical Insurance and Coding (2 s.h.) Prerequisite: 15:251, Medical Terminology I, and 94:104, Body Structure and Function. This course will provide the students with an overview of medical health insurance claims, submission guidelines, and basic coding procedures. In addition, the student will work through a number of relevant case studies. (30-0)

15:251 Medical Terminology I (3 s.h.) A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

15:252 Medical Terminology II (3 s.h.) Prerequisite: None. However, 15:251, Medical Terminology I is highly desirable. A continuation of 15:251. To be taken concurrently with 70:251, Anatomy & Physiology, by those in the Medical Secretary curriculum. A brief review of basic medical terminology followed by a systems approach to learning terms associated with the anatomical, physiological, and pathological aspects of the body.

Classifications of associated pharmaceutical agents are studied with each related system. (45-0)

15:256 Medical Transcription II (3 s.h.) Prerequisite 15:249, Medical Transcription I. This course is designed to introduce students to hospital dictation. The students will progress through various levels of dictation including some advanced documents. (15-60)

15:259 Medical Office Procedures (3 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a medical office that includes preparing correspondence and patient records, filing, handling telephone services, making and keeping appointments, developing transcription skills, composing letters, discussing professionalism, applying grammar rules, and taking care of general office duties. Also includes medical ethics and etiquette, medical law, and use of computer for word processing. Students are expected to spend time outside of class working in the computer lab. (30-30)

15:265 Medical Transcription III (3 s.h.) Prerequisites: 15:249, Medical Transcription I. This course is designed to introduce students to live medical dictation from the clinical and radiology settings. The students will also be applying the issues of confidentiality and using medical reference books. (15-60)

15:280 On-the-Job Training (1-6 s.h.) On-the-Job Training is designed to provide a student an opportunity to apply his/her skills in a job setting. The On-the-Job experience is coordinated with an identified school coordinator and on-site sponsor. This is repeatable credit for a maximum of 6 hours. (0-180)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:134 Pharmacology (2 s.h.) Provides a basic foundation of the study of drugs including general concepts, biological factors affecting the action of drugs, and effects of medications on body systems. Includes allergy overview, the medication order, and discussion of legal and ethical issues related to pharmacology. (30-0)

90:140 Laboratory Tests (1 s.h.) To familiarize the student with lab tests and their normal ranges in the areas of hematology, urology, and microbiology. (15-0)

94:104 Body Structure and Function (4 s.h.) A basic study of the anatomy and physiology of the human body. Study progresses from the cell to tissues, organs and systems with emphasis on their interrelatedness. Discussion includes some of the alterations which occur in illness. Usage of applicable medical terminology is stressed. (45-30)

Medical Assistant

Information regarding the Medical Assistant Program can be found in the Health Section of Career Programs.

Are you considering transferring to a four-year college or university?

Students who earn associate degrees in the Business programs at NIACC may wish to apply their studies toward a bachelor's degree in business-related fields at a four-year college or university. For further information on such options in business studies as accounting, business education, entrepreneurship, finance, insurance, management, management information systems, marketing, and real estate at Buena Vista University, Drake University, Iowa State University, Minnesota State University-Mankato, Simpson College, University of Iowa, University of Northern Iowa, Upper Iowa University, and Wartburg College, please see pages 131-153 in the catalog or speak with a NIACC advisor.

HEALTH

Donna Orton, Division Head
(641) 422-4216

Medical Assistant

Medical Laboratory Technician

Nursing - Associate Degree

Nursing - Practical

Physical Therapist Assistant

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Medical Assistant

The Medical Assistant program is designed to prepare men and women to function as members of the health care delivery team and perform administrative and clinical procedures. This most often occurs in ambulatory settings such as medical offices and clinics.

Administrative duties include scheduling and receiving patients, preparing and maintaining medical records, performing basic secretarial skills and medical transcription, handling telephone calls, writing correspondence, serving as liaison between the physician and other individuals, and managing practice finances.

Clinical duties include asepsis and infection control, taking patient histories and vital signs, performing first aid and CPR, preparing patients for procedures, assisting the physician with examinations and treatments, collecting and processing specimens, performing selected diagnostic tests, and preparing and administering medications as directed by the physician.

NIACC's classrooms include the latest in computers, office, and laboratory equipment. The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on recommendation of the Committee of Accreditation for Medical Assistant Education.

Students must attain a grade point average of 2.00 (C) in program courses to proceed to the practicum. (A minimum grade of "C-" is allowed in Medical Office Procedures, Clinical Procedures I and II, and a minimum grade of "C" is required in Medical Terminology.) In addition, students must meet all course requirements prior to beginning the practicum. The student may be required to travel a distance for the externship. Externships are randomly assigned to the student and available sites are dependent on the permission of the specific agency.

Further information regarding progression in the program and specific program policies is provided to the MA student in the individual program handbook. Students are provided this handbook during the first MA class day. Students are referred to this handbook throughout the program.

Upon completion of the prescribed curriculum with a 2.00 GPA and a minimum overall cumulative college grade point average of 2.00, the student is awarded a diploma from NIACC. In addition, the student is eligible for the national certification examination to become a CMA (Certified Medical Assistant).

Beginning with the January 2001 administration of the Certification Examination, a student with a felony record will not be eligible for Certification Examination unless the CB (Curriculum Board) grants a waiver based on one or more of the mitigating circumstances listed in the *Disciplinary Standards*. The student can verify certification eligibility prior to entering the program by contacting the CB at the following address: AAMA (American Association of Medical Assistants), 20 North Wacker Drive, Ste. 1575, Chicago, IL 60606-2903.

A night class sequencing is also available for this program if numbers are sufficient. If the program is being extended beyond a one-year period, courses 90:141 and 90:142 are required to be taken during the final year of the course of study.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent is necessary for entrance into the program. Students are encouraged to meet with the counselor prior to program enrollment to arrange for assessment in keyboarding, reading, writing, and math to determine if additional course work is required to promote success. A physical examination providing evidence of current immunization and sound physical and mental health is also required prior to 90:141, Clinical Procedures I.

PRESCRIBED CURRICULUM

First Term

15:211 Word Processing	2 s.h.
15:212 Business Communication	3 s.h.
15:251 Medical Terminology I	3 s.h.
90:141 Clinical Procedures I	4 s.h.
94:104 Body Structure and Function	4 s.h.
OR Anatomy and Physiology I <u>and</u> II	
	16 s.h.

Second Term

15:109 Introduction to Accounting	3 s.h.
15:110 Electronic Calculators	1 s.h.
15:241 Human Relations	3 s.h.
15:250 Basic Medical Insurance and Coding	2 s.h.
15:259 Medical Office Procedures	3 s.h.
89:150 Employment Strategies	1 s.h.
90:142 Clinical Procedures II	4 s.h.
	17 s.h.

Summer Term (only Eight Weeks)

90:208 Medical Assistant Externship	6 s.h.
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Course Descriptions - Medical Assistant

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in a business. (45-0)

15:110 Electronic Calculators (1 s.h.) [Structured or Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student

plans and writes business letters, interoffice memorandums, and informal business reports. A secondary emphasis will be placed on oral communication, listening skills, nonverbal communication, and international communication. (45-0)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

15:250 Basic Medical Insurance and Coding (2 s.h.) Prerequisite: 15:251, Medical Terminology I, and 94:104, Body Structure and Function. This course will provide the students with an overview of medical health insurance claims, submission guidelines, and basic coding procedures. In addition, the student will work through a number of relevant case studies. (30-0)

15:251 Medical Terminology I (3 s.h.) A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

15:259 Medical Office Procedures (3 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a medical office that includes preparing correspondence and patient records, filing, handling telephone services, making and keeping appointments, developing transcription skills, composing letters, discussing professionalism, applying grammar rules, and taking care of general office duties. Also includes medical ethics and etiquette, medical law, and use of a computer for word processing. Students are expected to spend time outside of class working in the computer lab. (30-30)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:141 Clinical Procedures I (4 s.h.) Assist physician with examinations and treatments, prepare patients for examinations and diagnostic procedures, administer first aid and CPR, maintain and use aseptic techniques, obtain and record patient data. Perform routine tests, steril-

ize instruments, and learn related terminology. If taking curriculum beyond a one-year period, this course should be taken during the final year of the curriculum, (45-30)

90:142 Clinical Procedures II (4 s.h.) Prerequisite: 90:141, Clinical Procedures I. A continuation of Clinical Procedures I with emphasis on pharmacology, administration of medications, electrocardiography and the circulatory system. Principles of radiography and nutrition. Collection and testing of laboratory specimens, including phlebotomy. If taking curriculum beyond a one-year period, this course should be taken during the final year of the curriculum, (45-30)

90:208 Medical Assistant Externship (6 s.h.) An eight-week term of practical experience in selected physicians' offices, clinics, or laboratories. It offers the students an opportunity to perform various clinical and office procedures under the supervision of the physician or assistant and the instructor/coordinator. This course has been designated as a pass/no pass course. (0-270)

94:104 Body Structure and Function (4 s.h.) A basic study of the anatomy and physiology of the human body. Study progresses from the cell to tissues, organs and systems with emphasis on their interrelatedness. Discussion includes some of the alterations which occur in illness. Usage of applicable medical terminology is stressed. (45-30)

Medical Laboratory Technician

(Cooperative Program with Hawkeye Community College)

The Medical Laboratory Technician program prepares men and women to work under the supervision of the medical technologist, pathologist, or other qualified physician in a medical laboratory. A technician performs tests that aid in the diagnosis and treatment of disease.

Specific tasks which the Medical Laboratory Technician might perform include collection of blood and other specimens, preparation and examination of stained slides of blood cells or bacteria, microscopic examination of urine, blood, and other body fluids, grouping and typing of blood, and the analysis of body fluids for chemical components.

This program is offered jointly by NIACC and Hawkeye Community College. The first two semesters of the program may be taken at NIACC and the completion of the program is taken at Hawkeye Community College, Waterloo, Iowa. The final semester of the program is provided in the clinical setting, which may occur in a location of the student's choice. This placement, however, is dependent on a space available basis in the agency of choice. Upon completion of the prescribed curriculum, the student is awarded an associate in applied science degree and is then prepared to work in hospital laboratories, clinics, physicians' offices, public health agencies, research institutions, and the armed forces. The program is accredited by the Committee on Allied Health Education and Accreditation and the National Accrediting Agency for Clinical Laboratory Sciences.

Graduates of the Medical Laboratory Technician Program may take a national certification examination.

Medical Laboratory Technicians may continue their education and become medical technologists.

ENTRANCE REQUIREMENTS

The applicant must meet at least one of the following groups of requirements and be a high school graduate or the equivalent to be eligible for admission to the Medical Laboratory Technology Program.

1. Be in the upper one-third of high school graduating class (or GED percentile average of 75 or above) and one year of high school Algebra I, Chemistry, and Biology with a "B" grade or higher in each semester.

OR

2. Be a high school or GED graduate.

AND

Score at least the following standards scores on each COMPASS Test (42 on Algebra, 82 on

Reading, and 65 on Writing) or a 20 standard score on each ACT: Math, Reading, and English subtests.

AND

One year of high school Algebra I, Chemistry, and Biology with a "B" grade or higher in each semester

OR

3. Successfully complete the following courses at NIACC or comparable courses at Hawkeye Community College:

30:090 Basic Writing
 30:120 College Reading Skills
 40:060 Beginning Algebra
 70:101 Biological Principles AND
 70:102 Biological Principles Lab
 70:140 Introductory Chemistry

All course work above must be completed with a 2.00 GPA.

OR

4. Any combination of the above requirements in 2 and 3 for algebra, reading, writing, chemistry, and biology that fulfill all 5 basic requirements.

The required related courses may be taken prior to enrolling or during the time the student is enrolled in the program. However, it is recommended that the curriculum be followed once the student is enrolled.

Students who withdraw from the program will be readmitted on a space-available basis. Preference will be given to those students who have been academically successful.

CURRICULUM

First Semester - NIACC

30:101 Communication Skills	3 s.h.
70:100 Intro to Lab Science	2 s.h.
70:140 Introductory Chemistry	4 s.h.
70:250 Anatomy and Physiology I.....	4 s.h.
80:110 Sociology OR	
80:101 General Psychology	3 s.h.
	16 s.h.

Second Semester - NIACC

15:251 Medical Terminology I	3 s.h.
70:109 Microbiology	4 s.h.
70:249 Urinalysis I.....	3 s.h.
70:251 Anatomy and Physiology II.....	4 s.h.
85:101 Public Speaking.....	2 s.h.
	16 s.h.

Summer Session - Hawkeye

112	Fundamental Lab Techniques.....	3 s.h.
114	Hematology I.....	3 s.h.
113	Clinical Microbiology I.....	4 s.h.
		10 s.h.

Third Semester - Hawkeye

216	Immunohematology I.....	4 s.h.
217	Coagulation.....	2 s.h.
218	Advanced Hematology.....	3 s.h.
219	Clinical Chemistry I.....	6 s.h.
220	Parasitology.....	1 s.h.
221	Serology.....	2 s.h.
		18 s.h.

Fourth Semester - Area II Clinical Sites**(24-week term, clinical internship)*

229	Clinical Chemistry II.....	4 s.h.
224	Hematology II.....	4 s.h.
223	Clinical Microbiology.....	4 s.h.
226	Immunohematology II.....	2 s.h.
231	Serology II.....	1 s.h.
225	Urinalysis II.....	1 s.h.
232	Lab Survey & Review.....	1 s.h.
		17 s.h.

*As identified in the curriculum, this program is offered over a two-year period of time. The first two semesters are taken at NIACC. The next summer session and fall semester are taken at Hawkeye Community College in Waterloo, Iowa. The final semester is a 24-week clinical internship. NIACC and Hawkeye will attempt to secure clinical experiences in the NIACC area (not guaranteed).

Course Descriptions - Medical Laboratory Technician

15:251 Medical Terminology I (3 s.h.) A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

30:101 Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

70:100 Intro to Lab Science (2 s.h.) This course familiarizes the student with the Medical Laboratory Technician program and the field of laboratory medicine. The organization and role of the clinical laboratory are explored, as well as medical ethics and conduct, employment opportunities, and professional opportunities. (30-0)

70:109 Microbiology (4 s.h.) Morphology, physiology, taxonomy, and relationship of microorganisms to disease. In-depth laboratory study and suitable lecture material with applications to agriculture, industry, and medicine. (45-30)

70:140 Introductory Chemistry (4 s.h.) Prerequisite: 40:060, Beginning Algebra, or equivalent. A first-year college chemistry course which covers the concepts of chemistry. Among the topics included are systems of measurement, matter and energy, atomic theory, energy levels and atomic structure, the periodic table, ionic and covalent bonding, chemical equations, stoichiometry, acids and bases, states of matter, solutions, and redox. Lab experiments are performed and complement the classroom theory. Not accepted as a prerequisite for other advanced chemistry courses except 70:273, Organic Chemistry. Equivalent to University of Iowa 4:7, General Chemistry I. (45-30)

70:249 Urinalysis I (3 s.h.) Prerequisite: 70:100, Intro to Lab Science. This course includes the study of urine formation and methodology determining the physical, chemical, and microscopic properties of urine in normal and abnormal states. (30-30)

70:250 Anatomy and Physiology I (4 s.h.) Prerequisite: 70:111, Human Biology, or 70:101, Biological Principles, highly recommended. A study of the human body emphasizing the complementary nature of structure and function, molecular and cellular interactions, homeostasis, and metabolic processes. A cat dissection constitutes a major portion of the laboratory exercises. 70:250 includes a study of cells, tissue, membranes, skeletal, muscular, and reproductive systems. (45-30)

70:251 Anatomy and Physiology II (4 s.h.) Prerequisite: Successful completion of 70:250, Anatomy and Physiology I, strongly recommended. A continuation of 70:250, Anatomy and Physiology I. Includes a study of the circulatory, respiratory, digestive, endocrine, urinary, and nervous systems. Cat dissections continued, plus kidney, brain, and eye dissections. (45-30)

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to enroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:110 Sociology (3 s.h.) An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

85:101 Public Speaking (2 s.h.) Public speaking as an intellectual tool for use in argumentation and persuasion in a democratic society. (Offered each term.) (30-0)

Associate Degree Nursing

Associate Degree Nursing is designed to prepare men and women for general staff registered nursing positions which involve direct care of patients. There are two routes of entry into the program — one for beginning regular students and one for Licensed Practical Nurses. For beginning students entering in June, the program can be completed in one summer term and four academic terms. Transfer students are assessed on an individual basis. The Iowa Code authorizes the Iowa Board of Nursing to review past felony convictions prior to determining eligibility for licensure. Individuals considering enrollment or currently enrolled in the nursing program should notify the Iowa Board of Nursing regarding prior felony convictions to ensure eligibility for licensure upon completion of the program.

Upon satisfactory completion of the prescribed curriculum, the student is awarded an associate in applied science degree and is eligible for the NCLEX-RN exam. After passing this examination, the graduate receives registered nurse status. The program is approved by the Iowa Board of Nursing and accredited by the National League for Nursing Accrediting Commission, 61 Broadway - 33rd Floor, New York, NY 10006, (212-363-5555, ext. 153).

Further information regarding progression in the program and specific program policies is provided to the ADN student in the individual program handbook. Students are provided this handbook during the first ADN class day at the beginning of each year. Students are referred to this handbook throughout the program.

For graduates wishing to obtain a baccalaureate degree in nursing, the ADN program articulates into other BSN programs in Iowa. The University of Iowa College of Nursing offers its satellite RN to BSN Progression Program on the NIACC campus. Through this program RNs may complete all course work for their BSN locally.

ENTRANCE REQUIREMENTS

The applicant must complete the application process through the health professions counselor located in the Student Services office. Admission is based on the following criteria:

1. Completion of a high school diploma or equivalency program
2. Meet two of the following criteria:
 - a. Graduated in the upper half of the high school class.
 - b. Graduated from high school with a minimum of a 2.5 GPA.
 - c. Completed the ACT exam with a composite score of 20 or higher. If the ACT was taken in high school, results are probably recorded on the high school transcript. If the ACT was taken after high school and is not recorded on the high school transcript, results must be forwarded to NIACC. Students with no ACT scores must contact the Admissions Office to take the COMPASS placement assessment.

Applicants who do not meet requirements or those with a poor academic history may meet entrance requirements by successfully completing approved college courses. These courses should be discussed with the health professions counselor. Preference is given to students who meet the prerequisites the fall semester prior to anticipated entry into the program. Students currently enrolled in high school are an exception to this.

Prerequisites: The following required courses must be completed with a “C” grade or better.

Mathematics:

Four semesters of high school/college preparatory math in high school (e.g., Algebra I, Algebra II, Geometry) OR
two semesters of college equivalent math (e.g., 40:060, Beginning Algebra; 40:120, Intermediate Algebra)

Science:

Chemistry: two semesters of high school/college preparatory chemistry OR
one semester of college chemistry (e.g., 70:140, Introductory Chemistry)

Biology: two semesters of high school/college preparatory biology OR
one semester of a college biology course (e.g., 70:101, Biology and lab or 70:111, Human Biology and Lab)

Computer Technology:

Since the NCLEX licensing exam is a computerized test, two semesters of high school computer classes or one semester of a computer application class are also strongly recommended.

It is recommended that 4-6 semesters of high school English and 4-6 semesters of social studies be taken. An application to the ADN program, high school transcript, GED scores (if applicable), all college transcripts, and results of the ACT must be in the applicant's folder before the admissions committee takes action on acceptance into the Associate Degree Nursing Program. Upon acceptance, a physical examination providing evidence of current immunization and sound physical and mental health is required. After being accepted into the program, a student may delay entrance into the program no more than two years. A student will be required to reapply to the program after this time period.

The related course requirements scheduled for the freshman year must be taken in the sequence and time lines indicated. However, the required related courses (noted with an * in the curriculum) may be taken prior to enrolling or during the time the student is in the nursing program. Students should be aware they may need to travel a distance for clinical experience and that some clinical experiences will be scheduled during evening/night hours and weekends. Criminal and adult abuse checks may also be required by individual agencies and the cost will be the responsibility of the student.

Students must attain a “C” grade in all nursing courses and related required courses. An overall 2.00 GPA in the prescribed curriculum and a minimum overall cumulative college grade point average of 2.00 is required for graduation from this program.

Students who withdraw from the program must make formal application for reentry and upon acceptance will be considered on a space-available basis. Readmission criteria is addressed in the ADN Student Handbook. A student may reenter the nursing curriculum one time. Options will be discussed on an individual basis for students unsuccessful at any level of the program.

PRESCRIBED CURRICULUM

First Term (Summer - 6 weeks)

30:101 Communication Skills I* (30:101C).....	3 s.h.
70:109 Microbiology*	4 s.h.
90:106 Introduction to Nursing	1 s.h.
	8 s.h.

Second Term (Fall)

**70:250 Anatomy and Physiology I*	4 s.h.
80:101 General Psychology*	3 s.h.
80:230 Human Growth and Development*.....	3 s.h.
90:108 Nursing I	7 s.h.
	17 s.h.

Third Term (Spring)

70:200 Nutrition*	3 s.h.
**70:251 Anatomy and Physiology II*	4 s.h.
90:111 Nursing II	10 s.h.
	17 s.h.

** Anatomy and Physiology I and II must be completed within five years of beginning the nursing component of the curriculum.

Fourth Term (Fall)

80:110 Sociology*	3 s.h.
90:210 Nursing III	12 s.h.
	15 s.h.

Fifth Term (Spring)

30:102 Communication Skills II* (30:102C).....	3 s.h.
90:211 Nursing IV.....	12 s.h.
	15 s.h.

*Courses which may be taken prior to entering the nursing program. Once in the nursing program, courses must be taken in the identified sequence.

NOTE: Prior to Nursing I, students are required to obtain CPR certification for the adult, child and infant, and current certification must be maintained throughout the duration of the program. They may select either American Heart Association or American Red Cross classes to satisfy this requirement.

Course Descriptions - Associate Degree Nursing

30:101C Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer’s Workbench analyses programs, the Writer’s Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of “C” or higher. (45-0)

30:102C Communication Skills II (3 s.h.) Prerequisite: 30:101C, Communication Skills I. Students must have earned a “C” or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer’s Workbench analyses, Writer’s Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of “C” or higher. (45-0)

70:109 Microbiology (4 s.h.) Morphology, physiology, taxonomy, and relationship of microorganisms to disease. In-depth laboratory study and suitable lecture material with applications to agriculture, industry, and medicine. (45-30)

70:200 Nutrition (3 s.h.) Prerequisite: high school or college chemistry. Introduces the scope of the science of nutrition and its application to the nurse’s role in promoting good nutrition throughout the life span. Principles of diet modification are presented as they relate to specific health problems. Nursing assessment, the patient’s nutritional needs, and dietary planning are included. This course may also be taken during the summer between the freshman and sophomore year but must be completed prior to Nursing III.(45-0)

70:250 Anatomy and Physiology I (4 s.h.) Prerequisite: 70:111, Human Biology or 70:101, Biological Principles, highly recommended. A study of the human body emphasizing the complementary nature of structure and function, molecular and cellular interactions, homeostasis, and metabolic processes. A cat dissection constitutes a major portion of the laboratory exercises. 70:250 includes a study of cells, tissue, membranes, skeletal, muscular, and reproductive systems. (45-30)

70:251 Anatomy and Physiology II (4 s.h.) Prerequisite: Successful completion of 70:250, Anatomy and Physiology I, strongly recommended. A continuation of 70:250, Anatomy and Physiology I. Includes a study of the circulatory, respiratory, digestive, endocrine, and nervous systems. Cat dissections continued, plus kidney, brain, and eye dissections. (45-30)

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to coenroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:110 Sociology (3 s.h.) An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

80:230 Human Growth and Development (3 s.h.) A study of the physical, mental, emotional, and social growth of the person from infancy through adulthood. Discussions include the need for love, affection, and attention; the concept of ego and sense of identity; the need of human bonds; the value of interpersonal dialogue; the capacity to develop intelligence; and the socioeconomic/ethnic influences. (45-0)

90:106 Introduction to Nursing (1 s.h.) An introduction to the philosophy and conceptual framework of the NIACC Associate Degree Nursing program. The course includes basic concepts related to legal and ethical aspects of nursing, nursing roles, and current trends in health care. The student is introduced to wellness-illness theory, the therapeutic nurse-patient relationship and effective communication techniques. An introduction to caring concepts is also included. (15-0)

90:108 Nursing I (7 s.h.) Prerequisite: 90:106, Introduction to Nursing, 70:109, Microbiology, and 30:101C, Communication Skills I. Introduction of the basic nursing concepts and the nursing process with special emphasis on the assessment and nursing diagnosis component. The course progresses from simple to complex, including comfort and safety needs in basic skill development. Includes beginning concepts from the life span, health maintenance, diet modification, psychological health, and pharmacology. Application from the biological, physical, and social sciences are utilized by the student in the care of clients, in long-term care and medical-surgical settings. (60-75)

90:111 Nursing II (10 s.h.) Prerequisite: 90:108, Nursing I; 70:250, Anatomy and Physiology I; 80:230, Human Growth and Development; and 80:101, General Psychology. Utilization of the nursing process with emphasis on planning in meeting client needs resulting from primary assaults on self-esteem as seen in alteration in body structure, body function, lifestyle, self-concept, and interpersonal relationships. Principles of diet modification, pharmacological therapy, mental health concepts, mobility concepts, and health maintenance through the life span are integrated into the progressive development of the student's knowledge and

skills. Clinical experiences include opportunities to apply the nursing process in maternal-newborn, pediatrics, and medical-surgical settings. (105-135)

90:210 Nursing III (12 s.h.) Prerequisite: 90:111, Nursing II; or 90:113, Nursing IIA, or consent of Associate Degree Nursing faculty, plus all freshman year nonnursing courses. Utilization of the nursing process with emphasis on implementation in meeting client needs resulting from manifestations of disturbed personal coping, disruptive personal lifestyles, disintegrated life patterns, and impairments in oxygenation and nutrition throughout the life span. Clinical experiences will include opportunities to apply the nursing process in a variety of care settings. (105-225)

90:211 Nursing IV (12 s.h.) Prerequisite: 90:210, Nursing III, or consent of Associate Degree Nursing faculty, plus 80:110, Sociology. Utilization of the nursing process with emphasis on evaluation in meeting client needs resulting from impairments relating to nutrition, elimination, and sensory stimulation throughout the life span. Concepts of management, legal, and ethical aspects of the nursing profession and issues related to current trends are presented. Clinical experiences will focus on clients with complex needs. The management experience is the culmination of the student's academic and clinical education in which the student will have an opportunity to care for several clients and apply basic skills in leadership and conflict management. (105-225)

ADN Option for Licensed Practical Nurses

A limited number of Licensed Practical Nurses who meet the following criteria are eligible to enter the Associate Degree Nursing Program at the sophomore level upon successful completion of the bridge course, 90:113, Nursing IIA. Criteria include: graduation from an approved Practical Nursing Program with a 2.5 cumulative GPA in the nursing courses; a current, unencumbered license; have practiced nursing within the past two years; meet ADN Program prerequisites; and have completed the support courses required during the first year of the ADN Program. If as a practical nursing student, the cumulative GPA for the nursing classes is below 2.5, the returning student would be required to enroll in 90:111, Nursing II. One year must transpire from completion of a practical nursing program and entry into the ADN Program. In addition, the student must be employed as an LPN in at least a part-time status during the one-year interval. Individual consideration will be given to applicants who have not practiced nursing within the last two years or who have practiced in a nontraditional setting. This may include a challenge examination. A verification of current skills and total hours of employment from the employers will also be used to assess appropriate placement in the program.

Another option available for the Licensed Practical Nurse to enter the second year of the ADN program is if the student has met the following criteria:

- a. Previously met entrance requirements for the ADN program and has been enrolled until midterm of Nursing I of the ADN program.
- b. Has attained a "C" in all support courses that would be required at the completion of Nursing II in the ADN program.
- c. Has attained a 3.00 GPA in the nursing component of the PN program.
- d. Has successfully passed NCLEX-PN and presents a copy of the license to the Division Head.
- e. Has an overall college GPA of 2.00.

Eighteen semester hours of first year nursing credit will be awarded upon successful completion of Nursing III, the first course with a clinical component. In the event a student is not successful in Nursing IIA or Nursing III, the student will be required to apply for reentry into the program for the second semester of the freshman year on a space-available basis.

Prerequisites: The following required courses must be completed with a grade of "C" or better.

Mathematics:

Four semesters of high school/college preparatory math in high school (e.g., Algebra I, Algebra II, Geometry) OR two semesters of college equivalent math (e.g., 40:060, Beginning Algebra; 40:120, Intermediate Algebra)

Science:

Chemistry: two semesters of high school/college preparatory chemistry OR one semester of college chemistry, 70:140, Introductory Chemistry

Biology: two semesters of high school/college preparatory biology OR one semester of a college biology course, 70:101, Biology and lab or 70:111, Human Biology and lab

Computer Technology:

Since the NCLEX-RN exam is a computerized test, computer competencies are strongly recommended.

Other elements of the selection process include high school and college GPA and ACT scores. All criteria for the ADN Program apply and should be reviewed. This information must be in the applicant's file before the admissions committee will act on the application. Upon acceptance, a physical examination providing evidence of current immunization and sound physical and mental health is required. Criminal and adult abuse checks may also be required by individual agencies and the cost will be the responsibility of the student.

Since the applicant's progress toward meeting prerequisites and admission requirements must be tracked, applicants to the Licensed Practical Nursing to Associate Degree Nursing Program must complete the application process through the health professions counselor located in the Student Services Office. Expected date of graduation will determine when the application to the program must be submitted.

Students must attain a "C" grade in all ADN courses and related required courses. An overall 2.00 GPA in the prescribed curriculum and a minimum overall cumulative college grade point average of 2.00 is required for graduation from this program.

Further information regarding progression in the program and specific program policies is provided to the ADN student in the individual program handbook. Students are provided this handbook during the first ADN class day. Students are referred to this handbook throughout the program.

The following are the support courses required prior to beginning the nursing aspect of the curriculum. These courses must be completed with a minimum of a "C" grade.

30:101 Communication Skills I (30:101C).....	3 s.h.
70:109 Microbiology	4 s.h.
70:200 Nutrition	3 s.h.
*70:250 Anatomy and Physiology I.....	4 s.h.
*70:251 Anatomy and Physiology II.....	4 s.h.
80:101 General Psychology	3 s.h.
80:230 Human Growth and Development.....	3 s.h.

*** Anatomy and Physiology I and II must be completed within five years of beginning Nursing IIA (90:113)**

PRESCRIBED CURRICULUM

First Term (Summer - one week, end of August)

90:113 Nursing IIA.....1 s.h.

Second Term (Fall)

80:110 Sociology*3 s.h.

90:210 Nursing III.....12 s.h.

15 s.h.**Third Term (Spring)**

30:102 Communications Skills II* (30:102C).....3 s.h.

90:211 Nursing IV.....12 s.h.

15 s.h.

*Courses which may be taken prior to entering the program.

NOTE: Prior to Nursing III, students are required to obtain CPR certification for the adult, child and infant. Students may select either American Heart Association or American Red Cross classes to satisfy this requirement and current certification must be maintained throughout the duration of the program.

Course Descriptions - ADN Option for Licensed Practical Nurses

30:101C Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:102C Communication Skills II (3 s.h.) Prerequisite: 30:101C, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

80:110 Sociology (3 s.h.) An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

90:113 Nursing IIA (1 s.h.) Prerequisite: Graduate of approved practical nursing program; hold current, unencumbered practical nurse license, plus successful completion of all freshman nonnursing courses. Provides introduction to program, differentiates roles of LPN and RN, reviews nursing process, presents spe-

cific communication techniques, and reviews content in laboratory setting. Students must obtain a passing grade in this course to continue into Nursing, 90:210. If a passing grade is not attained, the student will be required to register for Nursing, 90:111. This course has been designated as a pass/no pass course. (14-2)

90:210 Nursing III (12 s.h.) Prerequisite: 90:111, Nursing II; or 90:113, Nursing IIA, or consent of Associate Degree Nursing faculty, plus all freshman year nonnursing courses. Utilization of the nursing process with emphasis on implementation in meeting client needs resulting from manifestations of disturbed personal coping, disruptive personal lifestyles, disintegrated life patterns, and impairments in oxygenation and nutrition throughout the life span. Clinical experiences will include opportunities to apply the nursing process in a variety of care settings. (105-225)

90:211 Nursing IV (12 s.h.) Prerequisite: 90:210, Nursing III, or consent of Associate Degree Nursing faculty, plus 80:110, Sociology. Utilization of the nursing process with emphasis on evaluation in meeting client needs resulting from impairments relating to nutrition, elimination, and sensory stimulation throughout the life span. Concepts of management, legal, and ethical aspects of the nursing profession and issues related to current trends are presented. Clinical experiences will focus on clients with complex needs. The management experience is the culmination of the student's academic and clinical education in which the student will have an opportunity to care for several clients and apply basic skills in leadership and conflict management. (105-225)

Practical Nursing

Practical Nursing is designed to prepare individuals to work in nursing situations which are relatively stable and unchanging. They are also prepared to assist experienced registered nurses and physicians in nursing situations that are complex and changing. The Iowa Code authorizes the Iowa Board of Nursing to review past felony conviction prior to determining eligibility for licensure. Individuals considering enrollment or currently enrolled in the nursing program should notify the Iowa Board of Nursing regarding prior felony convictions to ensure eligibility for licensure upon completion of the program.

Students must attain a “C” grade in all nursing courses and at least a “C-” in related required courses. However, an overall 2.00 GPA in the prescribed curriculum and a minimum overall cumulative college grade point average of 2.00 is required for graduation from this program. If the student wishes to later seek application to the ADN program, a cumulative GPA of 2.5 in the nursing courses must be attained, as well as a “C” grade in all support courses required for the ADN program. If the student has not attained a 2.5 cumulative nursing course GPA, the student will be required to enroll in Nursing II, 90:111, of the ADN program.

Upon satisfactory completion of the prescribed curriculum, a diploma is awarded and the graduate is eligible for the NCLEX-PN exam. After passing this examination, the graduate receives licensed practical nurse status and is prepared to work in a beginning licensed practical nurse position under the supervision of qualified personnel. The program is approved by the Iowa Board of Nursing.

ENTRANCE REQUIREMENTS

The applicant must complete the application process through the health professions counselor located in the Student Services office. Entrance requirements include the following criteria:

1. Completion of a high school diploma or equivalency program.
2. Completion of high school with a grade point average of 2.00 or higher.
3. Have satisfactory COMPASS assessment test results in reading, writing, and math (these are administered by NIACC).

Applicants who do not meet requirements or those with a poor academic history may meet entrance requirements by successfully completing approved college courses and/or increasing assessment test results in an approved manner. This should be discussed with the health professions counselor.

Biology, general math (Basic Math, Mathematics for Decision Making, Algebra), and six semesters of English are recommended prior to applying to the program.

Since the NCLEX-PN exam is a computerized test, a computer class is strongly recommended. An application to the Practical Nursing Program, high school transcript, GED scores (if applicable), and all college transcripts must be in the applicant’s folder before the Admissions Committee takes action on acceptance into the Practical Nursing Program. After acceptance, a physical examination providing evidence of current immunization and sound physical and mental health is required. Criminal and adult abuse checks may also be required by individual agencies and the cost will be the responsibility of the student.

Applicants who have been previously enrolled in an approved nursing program may request consideration for advanced standing.

Students must complete all course requirements in the first two terms before enrolling in the third term. Students should be aware they may need to travel a distance for clinical experience and that some clinical experiences will be scheduled during evening hours and weekends.

Students who withdraw from the program must make formal application for reentry and upon acceptance will be considered on a space-available basis. After being accepted into the program, a student may delay entrance into the program no more than two (2) years. A student will be required to reapply to the program after this period of time. Readmission criteria is addressed in the PN Student Handbook. A student may reenter the nursing curriculum one time.

Further information regarding progression in the program and specific program policies is provided to the PN student in the individual program handbook. Students are provided this handbook during the first PN class day. Students are referred to this handbook throughout the program.

PRESCRIBED CURRICULUM

First Term (Summer - 6 weeks)

30:101 Communication Skills I* (30:101C).....	3 s.h.
94:101 Practical Nursing Arts I.....	4 s.h.
94:104A Body Structure and Function**	4 s.h.
OR Anatomy and Physiology I <u>and</u> II	
	11 s.h.

** Body Structure and Function must be completed within five years of beginning the nursing component of the curriculum.

Second Term (Fall)

80:101 General Psychology*	3 s.h.
94:102 Practical Nursing Arts II.....	8 s.h.
94:103 Practical Nursing: Maternal, Infant, and Child Care	5 s.h.
	16 s.h.

Third Term (Spring)

80:230 Human Growth and Development*.....	3 s.h.
94:110 Practical Nursing in Physical/Mental Illness of Adults	13 s.h.
	16 s.h.

*Courses which may be taken prior to entering the nursing program.

NOTE: Prior to enrolling in the fall semester of the program, students are required to obtain CPR certification for the adult, child, and infant, and current certification must be maintained throughout the duration of the program. They may select either American Heart Association or American Red Cross classes to satisfy this requirement.

Course Descriptions - Practical Nursing

30:101C Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to coenroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:230 Human Growth and Development (3 s.h.) A study of the physical, mental, emotional, and social growth of the person from infancy through adulthood. Discussions include the need for love, affection, and attention; the concept of ego and sense of identity; the need of human bonds; the value of interpersonal dialogue; the capacity to develop intelligence; and the socioeconomic/ethnic influences. (45-0)

94:101 Practical Nursing Arts I (4 s.h.) Prerequisite/Corequisite: 94:104, Body Structure and Function, 30:10C Communication Skills I. Orientation to nursing and the role of the practical nurse in the health community, history of nursing, ethical principles, legal nursing assessment, basic nursing skills, and practice of nursing skills in college laboratory. (45-30)

94:102 Practical Nursing Arts II (8 s.h.) Prerequisite: 94:101, Practical Nursing Arts I; 94:104, Body Structure and Function; and 30:101C, Communication Skills I. Prerequisite/Corequisite: 80:101, General Psychology. A continuation of 94:101. Continued development of basic skills, nursing assessment, creating and maintaining the physical environment, physical and psychological supportive measures, basic scientific principles of therapeutic nursing interventions and documentation, introduction to pharmacology and the administration of medications, normal nutrition, and therapeutic diets. Supervised practice in a college laboratory, long-term care nursing facilities, and medical-surgical settings. (75-120)

94:103 Practical Nursing: Maternal, Infant, and Child Care (5 s.h.) Prerequisite: 94:101, Practical Nursing Arts I; 30:101, Communication Skills I; 94:104A, Body Structure and Function. Prerequisite/Corequisite: 80:101, General Psychology. Offers the student basic knowledge about the family from the prenatal experience through labor and delivery to nursing care of the postpartum family and newborn. Includes an orientation to the nursing care of children in relation to normal growth and development through adolescence, as well as the effect of illness and hospitalizations on the child and family. Supervised clinical experience is provided in a birth center, a pediatric unit, and selected community agencies. (60-45)

94:104A Body Structure and Function (4 s.h.) A basic study of the human body. Study progresses from the cell to tissues, organs, and systems with emphasis on their interrelatedness. Discussion includes some of the alterations which occur in illness. Usage of applicable medical terminology is stressed. (45-30)

94:110 Practical Nursing in Physical-Mental Illness of Adults (13 s.h.) Prerequisite: 94:101, Practical Nursing Arts I; 94:102, Practical Nursing Arts II; 94:103, Practical Nursing: Maternal, Infant and Child Care; 94:104A, Body Structure and Function; and 80:101, General Psychology. Prerequisite/Corequisite: 80:230, Human Growth and Development. Utilization of the nursing process to develop basic skills in providing nursing care for patients with common health problems associated with each body system. Continuation of pharmacology and nutrition, beginning management skills and responsibilities of a licensed practical nurse, trends in nursing, preparation for licensure, and employment. Supervised clinical experience in medical/surgical areas, and surgical patient follow-through, and nursing facilities. (105-292)

Physical Therapist Assistant

The Physical Therapist Assistant Program is designed to prepare individuals to work under the supervision of a Physical Therapist in the delivery of physical therapy services. Responsibilities can include: implementing treatment programs according to the Physical Therapist's plan of care, training patients in exercises and activities of daily living, administering modalities such as ultrasound, electrical stimulation, whirlpool, and other treatment procedures, and communicating with the Physical Therapist on the patient's progress.

Physical Therapist Assistants are employed at a variety of settings including but not limited to the following: hospitals, private practice clinics, rehabilitation centers, home health agencies, sports injury clinics, long-term care facilities, industrial settings, and schools.

The program is two academic years in length including one summer. Students must attain a "C" grade in all PTA courses and a "C-" grade in all support courses to progress through the program. Minimum standards for graduation are a GPA of 2.00 in the prescribed curriculum and a minimum overall cumulative college grade point average of 2.00. Upon completion of the curriculum, the student is awarded an associate in applied science degree. The program is accredited by the Commission on Accreditation in Physical Therapy Education, 111 N. Fairfax Street, Alexandria, VA 22314, Telephone (703)706-3245. Graduates are eligible to sit for the licensure examination.

ENTRANCE REQUIREMENTS

The applicant must complete the application process through the health professions counselor located in the Student Services office. Entrance requirements include the following criteria:

1. Have a high school diploma or its equivalent.
2. Meet two of the three following criteria:
 - a. Graduated in the upper half of the high school class.
 - b. Graduated from high school with a minimum of a 3.00 GPA.
 - c. Achieved an ACT composite score of 20 or higher.

If the ACT was taken while in high school, the results are probably on the high school transcript. If the ACT was taken following high school, results must be forwarded to NIACC. Students with no ACT score must contact the Admissions Office to take the COMPASS placement assessment.

Applicants who do not meet the above requirements or those with a poor academic history may meet entrance requirements by successfully completing approved college courses. This should be discussed with the health professions counselor.

An applicant's file will not be reviewed until all application criteria have been submitted.

Prerequisites: The following courses must be completed with a grade of "C-" or better:

Mathematics:

Four semesters of high school/college preparatory math (e.g., Algebra I, Algebra II, Geometry) OR
Two semesters of college math (e.g., 40:060, Beginning Algebra, 40:120, Intermediate Algebra)

Science:

Two semesters of high school/college preparatory biology OR
One semester of college biology (e.g., 70:101, Biology Principles and lab or 70:111, Human Biology and lab)

Two semesters of high school/college preparatory chemistry or physics OR
One semester of college chemistry (e.g., 70:140, Introductory Chemistry) or physics (e.g., 70:122, Principles of Physics)

After acceptance, a physical examination documenting current immunization and abilities to perform program requirements is needed. Students are also required to obtain CPR certification for the adult, child, and infant. Current certification is required and must be maintained throughout the duration of the program. They may select either American Heart Association or American Red Cross classes to satisfy this requirement.

Students who withdraw from the program must make formal application for reentry and upon acceptance will be considered on a space-available basis. Readmission criteria is addressed in the PTA Student Handbook. A student may reenter the PTA curriculum once. After being accepted into the program, a student may delay entrance into the program no more than two (2) years. A student will be required to reapply to the program after this period of time.

Further information regarding progression in the program and specific program policies is provided to the PTA student in the individual program handbook. Students are provided this handbook during the first PTA class day. Students are referred to this handbook throughout the program.

PRESCRIBED CURRICULUM

First Term (Fall)

*15:251 Medical Terminology OR.....	3 s.h.
90:145 PTA Terminology (1 s.h.)	
*70:250 Anatomy and Physiology I.....	4 s.h.
*80:101 General Psychology	3 s.h.
90:149 Introduction to PTA.....	2 s.h.
90:144 Fundamentals for PTA	3 s.h.
15:114 Computer Literacy.....	1 s.h.
* 00:000 Humanities Elective++.....	3 s.h.
	17-19 s.h.

Second Term (Spring)

90:136 Introduction to the Clinic (1 week).....	1 s.h.
*30:101 Communications Skills I (30:101C).....	3 s.h.
OR *30:101 Communications Skills (4 s.h.)	
70:149 Kinesiology.....	3 s.h.
*70:251 Anatomy and Physiology II.....	4 s.h.
90:146 Developmental Processes.....	3 s.h.
90:159 PTA Modalities	4 s.h.
90:137 PTA Clinic I (2 weeks).....	2 s.h.
	20-21 s.h.

Third Term (Summer - 7 weeks)

90:147 Pathophysiology.....	3 s.h.
90:150 PTA Assessment Procedures	3 s.h.
90:138 PTA Clinic II (2 weeks).....	2 s.h.
	8 s.h.

Fourth Term (Fall)

*30:102 Communication Skills II (30:102C).....	3 s.h.
OR *30:102 Communication Skills II (4 s.h.)	
90:212 Therapeutic Exercise.....	3 s.h.
90:213 Orthopedics.....	3 s.h.
90:214 Neurology.....	4 s.h.
90:215 PTA Management	2 s.h.
	15-16 s.h.

Fifth Term (Spring)

90:218 PTA Clinic III (8 weeks).....	7 s.h.
90:219 PTA Clinic IV (6 weeks)	5 s.h.
90:217 PTA Seminar.....	1 s.h.
	13 s.h.

*Courses which may be taken prior to entering the program. Anatomy and Physiology must be taken within five years of beginning the program. Once enrolled in the program, courses must be taken in the identified sequence. Courses 90:136, 90:137, 90:138, 90:218 and 90:219 will be assigned a pass/fail grade and will not be calculated in the student's GPA.

++Humanities elective may be taken anytime prior to Term V.

The student should be aware that the clinical experience hours necessitate travel to various hospitals and clinics and may necessitate housing expenses.

Course Descriptions - Physical Therapist Assistant

90:145 PTA Terminology (1 s.h.) Includes an orientation to the vocabulary of medicine with emphasis on terminology related to rehabilitation. (15-0)

90:149 Introduction to PTA (2 s.h.) Prerequisite: None. This course provides an overview of the physical therapy profession and the role of the physical therapist assistant, including legal and ethical aspects of practice. Students will be introduced to the patient care process, be instructed in documentation, and given much opportunity to work on their communication skills. Includes an introduction to the Clinical Education component of the program. (30-0)

90:144 Fundamentals for PTA (3 s.h.) This course provides a foundation in physical therapy interventions

by covering basic assessment and measurement techniques that the PTA can utilize to monitor patients as well as basic treatment interventions such as range of motion and transfers. Purposes of all skills, proper techniques, and safety considerations will be addressed. Students will have lab time to apply, practice, and demonstrate skills they are taught. (30-30)

15:114 Computer Literacy (1 s.h.) [Open Entry/Open Exit] Introduces a student to basic computer hardware and software functions. Students with little or no computer background are encouraged to take this course. (This course will also introduce students to the proper use of E-mail and the Internet on the NIACC campus.) (0-30)

90:136 Introduction to the Clinic (1 s.h.) Prerequisite: All previous PTA courses. Skills, knowledge, and attitudes learned in Terminology, Introduction to PTA, and Fundamentals for the PTA will be applied to direct patient care in selected clinical settings. Includes application/integration of PTA course work with the goal of student providing quality care with uncomplicated patients and a high degree of supervision and guidance. (0-40)

70:149 Kinesiology (3 s.h.) Prerequisite: 70:250, Anatomy & Physiology I. Provides a basic understanding of normal human body movement as related to skeletal, articular, neurological, and muscular systems. Levers, torques, center of gravity, base of support and their relationship to posture, balance, and movement will be addressed. The student will learn anatomical palpations and the basics of human gait. (30-30)

90:146 Developmental Processes (3 s.h.) Prerequisite: 80:101, General Psychology. Presents normal physical, cognitive, and psychosocial developmental processes which affect an individual throughout the life span. Emphasis on integration of all aspects of human development and additional focus on application of physical processes to the field of physical therapy. Observational experience included. (42-8)

90:159 PTA Modalities (4 s.h.) Prerequisite: 90:144, Fundamentals for PTA. Prepares the student for safe and effective application of modalities for patient treatment. Mechanisms of action, indications, contraindications and treatment procedures will be covered for the following: heat, electromagnetic radiation, cold, massage, biofeedback, external compression, whirlpool, wound care, traction, and electrical stimulation. Pain and skin assessment will be included. Students will practice applications in lab. (37.5-45)

90:137 PTA Clinic I (2 s.h.) Prerequisite: All previous PTA courses. Skills, knowledge, and attitudes learned in Developmental Processes, Kinesiology, and PTA Modalities will be applied to direct patient care in selected clinical settings. Includes application/integration of current and previous PTA course work with the goal of student providing quality care with uncomplicated to complex patients and a degree of supervision and guidance that will vary with the complexity of the patient or the environment. This course has been designated as a pass/no pass course. (0-80)

90:147 Pathophysiology (3 s.h.) Prerequisite: 15:251, Medical Terminology; 70:250, Anatomy & Physiology I; and 70:251, Anatomy & Physiology II. Presents clinical disorders and diseases commonly treated in physical therapy. Pathology, etiology, diagnosis, signs, symptoms, prognosis and implications for rehabilitation will be covered. (45-0)

90:150 PTA Assessment Procedures (3 s.h.) Prerequisite: 15:251, Medical Terminology or 90:145, PTA Terminology; 90:144, Fundamentals for PTA; and 70:149, Kinesiology. This course provides an in-depth look at various assessment skills performed and utilized by the PTA. Special emphasis will be on theory, application procedures, and documentation of findings when utilizing goniometry and manual muscle testing in the clinic setting. Students will have an opportunity in the lab portion to apply, practice, and demonstrate techniques they are taught. (30-30)

90:138 PTA Clinic II (2 s.h.) Prerequisite: All previous PTA courses. Skills, knowledge, and attitudes learned in Pathophysiology and PTA Assessment Procedures will be applied to direct patient care in selected clinical settings. Includes application/integration of current and previous PTA course work, with the goal of the student providing quality care with uncomplicated to complex patients and a degree of supervision/guidance that will vary with the complexity of the patient or environment. This course has been designated as a pass/no pass course. (0-80)

90:212 Therapeutic Exercise (3 s.h.) Prerequisite: 90:144, Fundamentals for PTA, and 90:149, Kinesiology. This course studies the physiological effects of exercise on the musculoskeletal, cardiovascular, and pulmonary systems. Physical therapy treatment techniques to improve strength, flexibility, cardiovascular and pulmonary functions are presented. Treatment programs for specific diagnoses such as diabetes, pregnancy, and amputation are addressed. (30-30)

90:213 Orthopedics (3 s.h.) Prerequisite: 70:250 and 70:251, Anatomy and Physiology I and II, and 90:149, Kinesiology. Principles of fracture and soft tissue healing are applied to musculoskeletal injuries and disorders. Injuries, disorders, and function specific to each joint are covered. Physical therapy treatment, including joint mobilization, for specific joint injuries are presented. (30-30)

90:214 Neurology for the PTA (4 s.h.) Prerequisites: 70:250, Human Anatomy and Physiology I; 70:251, Human Anatomy and Physiology II; 90:147, Pathophysiology; 90:146, Developmental Processes. This course will provide information, discussion, and treatment considerations with neurologically based diagnoses. Emphasis will be on exploring clinical manifestations and treatment considerations with all the disorders with special emphasis on cardiovascular accidents. Typical treatment techniques, exercise programs, and treatment progression will be applied to lab scenarios with a variety of neurological diagnoses. (45-30)

90:215 PTA Management (2 s.h.) Prerequisite: All previous PTA technical courses. Includes the basic principles of management including levels of authority and responsibility, supervisory process, performance appraisals, and policies and procedures. The process of quality assurance and chart audits are discussed. Varieties of reimbursement systems and their impact on health care delivery are discussed. Resume writing, interviewing, and employability skills will also be covered. (30-0)

90:218 PTA Clinic III (7 s.h.) Prerequisite: All previous PTA courses. Skills, knowledge, and attitudes learned in Neurology, Orthopedics, Therapeutic Exercise and PTA Management will be applied to direct patient care in selected clinical settings. Includes application and integration of all PTA course work with the goal of the student consistently and efficiently providing quality care with uncomplicated to complex patients and a moderate to low degree of supervision/guidance except when addressing new and highly complex situations. This course has been designated as a pass/no pass course. (0-320)

90:219 PTA Clinic IV (5 s.h.) Prerequisite: All previous PTA courses. Skills, knowledge, and attitudes learned in all PTA course work will be applied to direct patient care in selected clinical settings. Includes application and integration of all PTA course work with the goal of the student consistently and efficiently providing quality care with uncomplicated to complex patients. This student usually needs no further guidance or supervision except when addressing new and highly complex situations. This course has been designated as a pass/no pass course. (0-240)

90:217 PTA Seminar (1 s.h.) Prerequisite: All previous PTA courses. This course will focus on the role of the PTA in helping patients achieve optimal mobility and become as independent as possible with functional activities. Lecture and discussions will incorporate students' experiences from PTA Clinic III and PTA Clinic IV so that each student has time to process and consider these learning experiences. All aspects of patient care will be addressed and case study presentations will be included to assist with problem-solving skills. (15-0)

Are you considering transferring to a four-year college or university?

Students who earn associate degrees in the Health programs at NIACC may wish to apply their studies toward a bachelor's degree in health-related fields at a four-year college or university. For further information on such options as dentistry, nursing, occupational therapy, optometry, pharmacy, physical therapy, physician, physician assistant, radiology, and rehabilitation services at Drake University, St. Ambrose College, and the University of Iowa, please refer to pages 131-153 in the catalog or speak with a NIACC advisor.

REGIONAL HEALTH

*Marge Wasicek, Director
Regional Health Education Center
(641) 422-7100*

The Regional Health Education Center is a partnership with NIACC and North Iowa Mercy Health Care Center.

A.A.S. Paramedic

***Emergency Medical Technician
Basic (EMT-B)***

***Emergency Medical Technician
Intermediate (EMT-I)***

***Emergency Medical Technician
Paramedic (EMT-P)***

Nurse Aide

A.A.S. Paramedic

The Paramedic Program is composed of three levels of training and certification. The three levels are: Emergency Medical Technician-Basic (EMT-B), Emergency Medical Technician-Intermediate (EMT-I), and Emergency Medical Technician-Paramedic (EMT-P). The courses are developed in a ladder sequence. The EMT-B courses are offered two to three times annually at various locations. The EMT-I courses are offered yearly, and EMT-P courses are offered every other year or as needed. The courses are offered evenings and weekends. All levels require completion of clinical experience. The EMT-I and EMT-P courses require completion of field experience with an advanced emergency medical service.

Program graduates may obtain employment or volunteer with public or private agencies employing emergency medical personnel who have successfully passed state and/or national certification examinations. Employers may also require psychological and physical dexterity examinations as a prerequisite for such employment. The College assumes no responsibility for paying for such examinations.

Upon successful completion of the two-year program, the graduate is awarded an associate in applied science degree.

Individuals who have completed the EMT-B, EMT-I, or EMT-P course prior to college credit approval and are currently certified in the state of Iowa may receive college credit. This college credit may be obtained for a nominal fee upon program completion and certification, upon submission of a qualification statement and supporting evidence of current certification and continuing education, and upon successful completion of the NIACC final test (80 percent or higher score).

ENTRANCE REQUIREMENTS FOR EMT-B:

1. Be at least 17 years of age at the time of enrollment.
2. Be proficient in writing, reading, and speaking English.
3. Hold or be eligible to obtain a current driver's license.
4. Be physically and emotionally capable of performing basic emergency care skills.
5. Current certification at the Basic Cardiac Life Healthcare Providers course with the American Heart Association.

Note: Criminal and adult abuse checks may also be required by individual agencies and the cost will be the responsibility of the student.

ENTRANCE REQUIREMENTS FOR EMT-I and EMT-P:

1. Be at least 17 years of age at the time of enrollment.
2. High school diploma or general education equivalent.
3. Maturity of judgment, sound moral character and health status to provide reasonable assurance that the student will meet the physical and mental demands of the occupation.
4. Evidence of successful completion in BCLS Healthcare Providers course.
5. Evidence of successful completion of a course of training for EMT-Basic.
6. Evidence of certification as an EMT-Basic for the state of Iowa.
7. A recommendation by the Advance Care Training Admission Committee attesting to the applicant's attitude, professionalism, motivation, dependability, and desire to follow instructions and orders with reliability.

****Note:** Criminal and adult abuse checks may also be required by individual agencies and the cost will be the responsibility of the student.

A physical examination and immunization record are required prior to beginning hospital clinicals at all levels of course work. The immunization requirements include receiving the hepatitis B vaccine or signing a waiver.

EMS - RELATED COURSES

89:195 EMT-B: Part I.....	4 s.h.
89:196 EMT-B: Part II.....	2 s.h.
89:175 EMT-I.....	4 s.h.
89:171 EMT-Paramedic: Part I.....	6 s.h.
89:172 EMT-Paramedic: Part II.....	7 s.h.
89:173 EMT-Paramedic: Part III.....	3 s.h.
89:174 EMT-Paramedic Part IV	3 s.h.
	29 s.h.

The required related courses may be taken prior to enrolling, during the time the student is enrolled in the program, or after completion of the sequential curriculum.

Required Courses

30:101 Communication Skills I.....	4 s.h.
30:102 Communication Skills II.....	4 s.h.
40:121 Mathematics for Decision Making	3 s.h.
70:250 Anatomy and Physiology I.....	4 s.h.
70:251 Anatomy and Physiology II.....	4 s.h.
80:101 General Psychology	3 s.h.
80:230 Human Growth & Development.....	3 s.h.

Other Recommended Related Electives

15:140 Introduction to Computers and Information Systems.....	3 s.h.
15:142 Principles of Management.....	3 s.h.
15:241 Human Relations.....	3 s.h.

Course Descriptions

89:171 EMT-P: Part I (6 s.h.) Prerequisite: EMT-B and EMT-I State of Iowa Certification, or 89:189, EMT-I: Part I. This course provides the student with advanced prehospital training. It includes roles and responsibilities, overview of human systems, emergency pharmacology, airway management, patient assessment, and trauma management (including PHTLS). (60-60)

89:172 EMT-P: Part II (7 s.h.) Prerequisite 89:171, EMT-P: Part I. This course is a continuation of 89:171, EMT-P: Part I. It includes respiratory, cardiac, diabetic, neurological, toxicological, abdominal, gynecological, behavioral, pediatric, geriatric and obstetrical emergencies. (71-69)

89:173 EMT-P: Part III (3 s.h.) Prerequisite 89:171, EMT-P: Part I; 89:172, EMT-P: Part II. This course includes 68 hours of hospital clinical experience and 67 hours of field experience. (0-0-90-45)

89:174 EMT-P: Part IV (3 s.h.) Prerequisite 89:171, EMT-P: Part I; 89:172, EMT-P: Part II; 89:173, EMT-P: Part III. This course includes 67 hours of hospital clinical experience and 68 hours of field experience. (0-0-45-90)

89:175 EMT-I (4 s.h.) Prerequisite: EMT-B State of Iowa Certification. This class provides the student with advanced skills to provide emergency care and transport. It includes roles and responsibilities, legal aspects, EMS system and communications, patient assessment, advanced airway management, shock management, including intravenous therapy and defibrillation. It also includes 45 hours of clinical/field experience. (30-30-45)

89:195 EMT-B: Part I (4 s.h.) This class provides the student with the necessary knowledge and skill to perform basic emergency care and transport. It includes an introduction preparation module, airway management module, patient assessment module, and medical, behavioral, and obstetrical/gynecological emergencies module. Six hours of clinical in the hospital and nursing home is also included. (47-30)

89:196 EMT-B: Part II (2 s.h.) Prerequisite 89:195, EMT-B: Part I. This course is a continuation of 89:195. It includes a trauma module, infants and children module, and operations module. Twelve hours of clinical in the hospital is also included. (20-26)

Nurse Aide

The Nurse Aide course prepares individuals to work in long-term care facilities (LTC) and hospitals.

Nurse Aide classes are offered monthly in the NIACC area. Upon completion of the Nurse Aide course, a state written test and a skills demonstration test must be completed with a score of 70 percent or better. Passing these tests is required in order to be placed on the Department of Inspections and Appeals Nurse Aide Registry. Placement on the Iowa Nurse Aide Registry is necessary to be employed as a nurse aide in long-term care in Iowa; this includes nursing facilities and skilled nursing units in hospitals.

ENTRANCE REQUIREMENTS FOR NURSE AIDE

1. Must be 16 years or older.
2. High school diploma or GED. (Note: if you are currently in high school, you must submit a letter of acknowledgement from your high school counselor.)
3. Strength and endurance to meet the requirements in performing skills such as lifting and moving residents.
4. Physical exam by a physician. This must be completed prior to the clinical portion of the course.
5. Current immunization records are required prior to beginning clinical. The immunization requirements include Rubella titer, TB test, hepatitis B vaccine, or signing a waiver for the hepatitis vaccine.

****Note:** Criminal and adult abuse checks may also be required by individual agencies and the cost will be the responsibility of the student.

Course Descriptions

89:164 (2 s.h.) 89:165 (1 s.h.) Nurse Aide Theory and Clinical. This 75-hour nurse aide course has been designed to meet the training requirements of The Omnibus Budget Reconciliation Act of 1987 (OBRA) for aides working in nursing facilities (NF) and skilled nursing facilities (SNF). Emphasis in the course is on students achieving a basic level of knowledge and demonstrating skills to provide safe, effective resident care. The course has been developed in six units of study. The theory portion includes 30 hours of classroom time and 15 hours of laboratory practice. The clinical experience includes 30 hours in a nursing facility.

For further information, contact the Health Occupations counselor at 1-888-GO NIACC, ext. 4207 or 641-422-4207.

Quotable Quote:

Learning is not attained by chance. It must be sought with ardor and attended to with diligence.

-Abigail Adams

PUBLIC SERVICE

Dr. Don Kamps, Evening Dean
(641) 422-4326

*Dr. Jim Zirnhelt, Division Head,
Humanities and Social Science*
(641) 422-4282

Program graduates may obtain immediate employment with public or private agencies concerned with public safety, crime prevention, or the apprehension and rehabilitation of criminals. However, persons considering employment with public agencies should check to determine the necessity of successfully passing psychological and physical dexterity examinations as a prerequisite to such employment. The College assumes no responsibility for paying for such examinations.

Upon successful completion of the two-year program, the graduate is awarded an associate in arts degree and a NIACC Law Enforcement Certificate.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent is necessary.

REQUIRED COURSES

80:190 Criminal Law I.....	3 s.h.
80:191 Criminal Law II.....	3 s.h.
80:192 Patrol Procedures.....	3 s.h.
80:290 Criminal Evidence	3 s.h.
80:291 Administration of Justice	3 s.h.
80:292 Criminal Investigation	3 s.h.
30:101 Communication Skills I*.....	4 s.h.
30:102 Communication Skills II*.....	4 s.h.
Humanities Electives	8 s.h.
60:232 First Aid and Personal Safety.....	1 s.h.
70:101 Biological Prin. (3 s.h.*) OR	
70:114 Intro Physical Science (4-5 s.h.*) OR	
70:122 Principles of Physics (4 s.h.*) OR	
70:140 Introductory Chemistry (4 s.h.*) OR	
70:135 General Chemistry I*.....	4-5 s.h.
80:101 General Psychology*	3 s.h.
Mathematics*	3-4 s.h.
80:110 Sociology*	3 s.h.
80:120 Intro to American Govt (3 s.h.*) OR	
80:121 American State/Local Govt*	3 s.h.
80:111 Social Problems (3 s.h.*) OR	
80:112 Marriage & Family (3 s.h.*) OR	
80:230 Human Growth & Dev*	3 s.h.

SUGGESTED COURSE

89:100 Cooperative Work Experience	1-5 s.h.
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*General Education courses must total at least 40 semester hours to meet A.A. degree requirements. A minimum of 60 semester hours are needed for graduation.

Law Enforcement

The NIACC Law Enforcement curriculum was developed with the assistance of the Law Enforcement Division of the University of Iowa and a local advisory committee of law enforcement officials as an articulated program. The curriculum meets requirements for those persons already employed by law enforcement agencies who wish to obtain further education for professional advancement, as well as for those who desire advanced study in criminology or social welfare.

Graduates may perform duties with police departments, sheriffs' offices, highway patrols, narcotics bureaus, correctional institutions, crime prevention laboratories, industry, and private investigation services. In addition, the United States Government's Secret Service, Immigration Service, Border Patrol, and courts hire a significant number of law enforcement personnel.

During the 1998-99 school year, an articulation agreement was reached with the Iowa Law Enforcement Academy. This agreement allows up to 15 hours of credit earned at the Academy to be awarded at NIACC.

Course Descriptions - Law Enforcement

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

60:232 First Aid and Personal Safety (1 s.h.) Lecture-type course designed to give the layperson adequate first aid knowledge and skills with emphasis on accident prevention. (15-0)

70:101 Biological Principles (3 s.h.) Study of organismic biology including organization, metabolism, and reproduction of living systems. Includes evolutionary patterns, inheritance, growth, development, ecosystems, and structure-function relationships among organisms. (45-0)

70:114 Intro to Physical Science (4 s.h.) Prerequisite: High school Algebra or equivalent. An introductory college level, one-semester course intended to meet general education requirements. Topics are chosen from the fields of physics and chemistry. (45-30)

70:122 Principles of Physics (4 s.h.) Prerequisite: 40:120, Intermediate Algebra or equivalent. An introductory level, one-term course. Major topics are measurement, matter in motion, heat, wave motion, electricity and magnetism, and modern physics. (45-30)

70:135 General Chemistry I (5 s.h.) Prerequisite: 40:060, Beginning Algebra, or equivalent. Introduction to the basic concepts and facts of chemistry. Topics include atomic structure, formation of ionic and covalent compounds, molecular structure, chemical equations including mass relations, solutions, and gases. Intended for nonscience majors. (45-60)

70:140 Introductory Chemistry (4 s.h.) Prerequisite: 40:060, Beginning Algebra, or equivalent. A first year college chemistry course which covers the concepts of chemistry. Among the topics included are systems of measurement, matter and energy, atomic theory, energy levels and atomic structure, the periodic table,

ionic and covalent bonding, chemical equations, stoichiometry, acids and bases, states of matter, solutions, and redox. Lab experiments are performed and complement the classroom theory. Not accepted as a prerequisite for other advanced chemistry courses except 70:273, Organic Chemistry. (45-30)

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to enroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:110 Sociology (3 s.h.) An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

80:111 Social Problems (3 s.h.) Prerequisite: 80:110, Sociology, is strongly recommended. Introduction to the study of contemporary social problems. The course examines how social problems are identified, explores underlying conditions and causes of social problems, and considers possible solutions and policy implications. Emphasis is on sociological and critical thinking frameworks. Topics of exploration include: mental illness, substance abuse, crime, prejudice and discrimination, prostitution, and poverty. (45-0)

80:112 Marriage and Family (3 s.h.) A survey of the family as a social unit in the modern American culture. A study is made regarding the creation of the American family from various cultures as well as the problems the family is subjected to such as sex relations, social roles, communication, finance, and divorce. (45-0)

80:120 Introduction to American Government (3 s.h.) A survey of the American federal system of government including a description and analysis of the constitution, the legislative, executive, and judicial branches of government, and the American political process. (45-0)

80:121 American State and Local Government (3 s.h.) A survey of state and local governments in the United States including an analysis of federal-state relations, state constitutions, state and local legislative, executive, and judicial systems, and major issues in state and local politics. (45-0)

80:190 Criminal Law I (3 s.h.) The philosophy and basis for law, the historical development of criminal law and procedure, the structure and definitions of the criminal laws. Required course for Law Enforcement curriculum. (45-0)

80:191 Criminal Law II (3 s.h.) Required course for Law Enforcement curriculum. Covering the law of arrest, search, and seizure. (45-0)

80:192 Patrol Procedures (3 s.h.) Responsibilities, techniques, and methods of police patrol. Methods of traffic law enforcement, regulation and control; and fundamentals of traffic accident investigations. (45-0)

80:230 Human Growth and Development (3 s.h.) A study of human growth: physical, mental, emotional, and social. Investigation of the child's need for love, affection, and attention; the need for reexamination of many conventional school practices in relation to the child's ego concept, sense of identity and level of aspiration; the importance of human bonds and the value of interpersonal dialogue in development; the capacity children have for the development of intelligence; and the influence of socioeconomic class and racial and ethnic discrimination on human development. (45-0)

80:290 Criminal Evidence (3 s.h.) The kinds and degrees of evidence and the rules governing the admissibility of evidence in court. Required course for Law Enforcement curriculum. (45-0)

80:291 Administration of Justice (3 s.h.) Arrest, search, and seizure; review of court systems; procedures from incident to final disposition; principles of constitutional, federal, state and civil laws as they apply to and affect law enforcement. Required course for Law Enforcement curriculum. (45-0)

80:292 Criminal Investigation (3 s.h.) Fundamentals of investigation, crime scene search and recording, collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, interviews and interrogation, follow-up, and case preparation. (30-30)

89:100 A-B-C-D-E Cooperative Work Experience (1-5 s.h.) Practical training on the job under the cooperative supervision of the college and work supervisor. Designed primarily for the college transfer students to provide an experience that: (1) is directly related to their college program and career objectives; or (2) will help them test out career interest and/or discover new career possibilities. Credit is determined on the basis of one semester of credit for each 60 hours of approved employment to be completed in a term. Appropriateness of learning objectives is an essential factor in the approval process. 1-5 credits per semester, 12 credits maximum. (15-285)

Quotable Quote:

Never tell people how to do things. Tell them what to do and they will surprise you with their ingenuity.

-Gen. George S. Patton, Jr.

INDUSTRIAL TECHNOLOGY

*Gary Forbess, Division Head
(641) 422-4202*

Automotive

**Automotive Service
Automotive Service Technology**

Building Trades

**Building Trades - Day
Building Trades - Evening**

Climate Control

**Climate Control Mechanics
Climate Control Technology**

Electronics

**Electromechanical Systems
Technology**

Manufacturing

**General Machinist
Tool and Die Technology
General Machinist Evening**

Mechanical Design Technology

Welding - Evening

Industrial Technology careers have become highly sophisticated and specialized. Continuous re-training throughout one's entire career is commonly required in many occupations. For all of these reasons, a background in math, science, technology, and communications as shown below is suggested for entrance into NIACC's Industrial Technology Programs.

TECHNOLOGY

Drafting/CAD
Electricity/Electronics
Metals Processing
Other Electives

MATH

Applied Math OR
Algebra, Geometry, Trigonometry

SCIENCE

Applied Biology/Chemistry OR
Biology and Chemistry
Principles of Technology OR
Physics

ENGLISH/COMMUNICATIONS

Applied Communications
Workplace Readiness
Traditional English courses

NIACC has support services through the Student Learning Center (ISL) for students needing to strengthen their skills in one or more of these areas.

Quotable Quote:

Imagination is the highest kite that one can fly.
-Lauren Bacall

Automotive Service Technology

Automotive Service Technology is a 4½ semester associate in applied science (AAS) degree program. The program is ASE/NATEF Master Certified. All eight instructional areas meet industry and educational standards as identified by Automotive Service Excellence and evaluated by the National Automotive Technicians Education Foundation:

Engine Repair
Automatic Transmission/Transaxle
Manual Drive Train and Axles
Suspension and Steering
Brakes
Electrical/Electronic Systems
Heating and Air Conditioning
Engine Performance



Technicians are employed at automotive dealerships and independent service/repair facilities as general (line) technicians or as specialty technicians.

AAS DEGREE REQUIREMENTS:

Completion of required curriculum, with an average grade point of 2.00 (C).

AUTOMOTIVE PROGRAM GOAL

Prepare individuals for employment in the automotive service industry by:

- Maintaining an environment that is conducive to learning.
- Offering curriculum that reflects current industry requirements.
- Delivering classroom instruction that encourages analytical thinking.
- Providing laboratory experience that utilizes technical and problem-solving skills.
- Promoting workmanship that meets or exceeds industry standards.

Quotable Quote:

Both the educational and automotive communities should be proud of your commitment to quality automobile training programs.

- ASE President Ronald H. Weiner to NIACC regarding Automotive Program ASE/NATEF Certification

Automotive Service

Automotive Service serves as a foundation for the Automotive Service Technology AAS program. Students have the option to complete the 2½ semester program and earn a diploma, however, they are encouraged to seek an AAS degree to maximize their potential for success in the automotive service industry. Occupational areas of instruction of the diploma program are ASE/NATEF certified.

DIPLOMA OPTION REQUIREMENTS:

A diploma is granted to a person who has completed at least thirty (30) semester hours of credit. A minimum cumulative grade point average of 2.00 (C) is required. Developmental courses are not used in calculating the cumulative grade point average for graduation.

ENTRANCE ADVISING:

Due to the highly technical nature of the Automotive programs and NIACC's commitment to giving students the best possible opportunity for success, students will be scheduled for advisement sessions with counselors and program personnel. In these sessions, the student's career plans, previous background, transcripts, test scores, life experiences, and motivation will aid in designing a positive educational experience.

Automotive Service Technology**ASSOCIATE IN APPLIED SCIENCE DEGREE**

SCHEDULE

First Term

91:101 Career Math I	4 s.h.
95:130 Communications I.....	3 s.h.
96:132 Electrical Concepts.....	3 s.h.
98:144 Intro to Automotive Technology.....	3 s.h.
98:145 Brake Systems	3 s.h.
98:146 Suspension and Steering	3 s.h.
	19 s.h.

Second Term

91:102 Career Math II	4 s.h.
96:150 Career Physics	4 s.h.
98:147 Electrical Systems I.....	3 s.h.
98:148 Engine Repair.....	3 s.h.
98:149 Manual Drive Train & Axles.....	3 s.h.
98:161 Metal Processing & Metallurgy.....	2 s.h.
	19 s.h.

Summer Term

98:133 Heating and Air-Conditioning.	3 s.h.
98:180 Computerized Controls.....	2 s.h.
	5 s.h.

Third Term

15:241 Human Relations.....	3 s.h.
98:179 Automatic Transmissions & Transaxles .5	s.h.
98:208 Fuel Delivery Systems.....	3 s.h.
98:209 Electrical Systems II	5 s.h.
	16 s.h.

Fourth Term

89:150 Employment Strategies	1 s.h.
95:131 Communications II.....	3 s.h.
98:211 Engine Performance Testing.....	5 s.h.
98:212 Adv. Engine Performance	7 s.h.
	16 s.h.

Total Hours **75 s.h.**

DIPLOMA OPTION SCHEDULE

Completion of First Term, Second Term, and Summer Term (2½ semesters). Employment Strategies (89:150) will be offered to students who select this option.

Course Descriptions - Automotive Service and Automotive Service Technology

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

91:101 Career Math I (4 s.h.) This course is intended to provide the student with mathematics topics and applications having specific emphasis to Automotive, Building Trades, Climate Control Technology, General Machinist, and Tool & Die Technology. Topics include basic mathematical operations, formulas, and multi-dimensional measurement and calculation. (60-0)

91:102 Career Math II (4 s.h.) This course is a continuation of Career Math I. Additional topics include geometry, trigonometry and descriptive statistics with an emphasis on application. (60-0)

91:299A-D Special Problems in Career Programs (1-4 s.h.) Course arranged with special permission of instructor and Division Chair. Credit is based on standard contact hours and assigned by Division Chair and approved by Vice President for Academic Affairs. Course may be repeated for credit.

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

95:131 Communications II (3 s.h.) Further study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

96:132 Electrical Concepts (3 s.h.) The purpose of this course is to acquaint the student with electrical fundamentals. It will provide basic electrical and electronic background for a variety of technical fields which require such knowledge. Areas of instruction include safety, direct and alternating current, semiconductor and digital electronics, motors and controls, shop and lab practices. (30-45)

98:150 Career Physics (4 s.h.) Prerequisite/Corequisite: one semester of Career Math. An introduction to basic operating principles of gears, levers, pulleys, simple machines, and the effects of heat on solids, liquids, and gases. (45-30)

98:133 Heating & Air-Conditioning (3 s.h.) Prerequisite/Corequisite: 96:132, Electrical Concepts, or instructor's permission. Instruction in heat transfer principles applied in testing, repairing, and/or replacing heating and air-conditioning system components. Laboratory procedures for servicing and maintaining air-conditioning systems utilizing refrigerant recovery and recycling equipment. (30-60)

98:144 Introduction to Automotive Technology (3 s.h.) Prerequisite/Corequisite: strong mechanical aptitude. Instruction in fundamental shop safety, service procedures, precision measurement and engine operation, use of service manuals and service equipment. Laboratory procedures in performing new vehicle pre-delivery inspections, vehicle lubrication and fluid changes, and general maintenance and service of engine exhaust and cooling systems. (30-60)

98:145 Brake Systems (3 s.h.) Prerequisite/Corequisite: 98:144, Introduction to Automotive Technology. Instruction in the theory and operating principles of hydraulic and antilock (ABS) systems. Laboratory procedures for inspecting, testing diagnosing, repairing and/or replacing conventional, power, and ABS system components. (15-90)

98:146 Suspension and Steering (3 s.h.) Prerequisite/Corequisite: 98:144, Introduction to Automotive Technology. Instruction/laboratory service procedures for inspection, adjustments, alignment, repair and/or replacement of suspension and steering components. (15-90)

98:147 Electrical Systems I (3 s.h.) Prerequisite/Corequisite: 98:144, Introduction to Automotive Technology and 96:132, Electrical Concepts. Instruction in the electrical and electronic principles and testing procedures as applied to automotive circuits and microprocessors. Laboratory procedures to include the utilization of wiring schematics and test equipment for diagnosing and repairing instrumentation, electrical accessory, and lighting systems. (30-60)

98:148 Engine Repair (3 s.h.) Prerequisite/Corequisite: 98:144, Introduction to Automotive Technology. Instruction/laboratory procedures for engine repair diagnosis, removal, disassembly, inspection, overhaul and reassembly of automotive and/or light truck engines according to manufacturer's specifications. (15-90)

98:149 Manual Drive Train & Axles (3 s.h.) Prerequisite/Corequisite: 98:144, Introduction to Automotive Technology. Instruction/laboratory procedures for servicing, diagnosing, and repairing/replacing standard transmissions and clutches, transaxles, and differentials. (15-90)

98:161 Metal Processing and Metallurgy (2 s.h.) Practical applications of basic metal working tools and processes used in the field of automotive service. Covers basic SMAW, GMAW, GTAW, and oxyacetylene welding and cutting. (15-30)

98:179 Automatic Transmissions & Transaxles (5 s.h.) Prerequisite/Corequisite: 96:132, Electrical Concepts, or instructor's permission. Instruction in diagnosis, maintenance, and overhaul of major automatic transmissions and transaxles in various makes of automobiles. (45-90)

98:180 Computerized Controls (2 s.h.) Prerequisite/Corequisite: 96:132, Electrical Concepts, or instructor's permission. Instruction in theory, application, and diagnostics of automotive computers, sensors, and control devices. (15-45)

98:208 Fuel Delivery Systems (3 s.h.) Prerequisite/Corequisite: 96:132, Electrical Concepts, or instructor's permission; and strong mechanical aptitude. Instruction in the fundamentals of operation and service of complete fuel systems, including storage, delivery, and metering. (30-60)

98:209 Electrical Systems II (5 s.h.) Prerequisite/Corequisite: 98:147, Electrical Systems I, or instructor's permission. Strong mechanical aptitude. Instruction in operation, service, and troubleshooting of automotive electronic/electrical circuits and systems; to include starting, charging, and ignition systems. (45-90)

98:211 Engine Performance Testing (5 s.h.) Prerequisite/Corequisite: 98:180, Computerized Controls, or instructor's permission. Strong mechanical aptitude. Instruction in the theory, operation, and analysis of computer control distributorless ignition and emission systems, with emphasis placed on diagnosis/repair of problems using manufacturer flow charts, oscilloscopes, DVOMs, and scan tools. (45-90)

98:212 Advanced Engine Performance (7 s.h.) Prerequisite/Corequisite: 98:180, Computerized Controls, or instructor's permission. Strong mechanical aptitude. Instruction in the theory, operation, and testing of computerized engine control systems and other advanced electronic systems on the automobile, with emphasis placed on diagnosis/repair of problems using manufacturer flow charts, oscilloscopes, DVOMs, and scan tools. (75-105)

Building Trades - Day

Building Trades is a diploma program designed for individuals interested in a career in residential, commercial, or industrial building construction. Residential construction involves the building or remodeling of houses, condominiums, or apartment complexes. These structures are primarily wood frame construction. Commercial construction involves the building of single story office buildings, stores, or restaurants. These structures often use light gauge metal framing in addition to wood construction. Industrial construction includes the building of factories, hospitals, schools, or multistory office buildings. These structures may be constructed of concrete, masonry, structural steel, or a combination of materials.

The Building Trades Program develops students' skills through a combination of classroom-structured units, manipulative lab projects, and mentored job experiences. Classroom units provide students with necessary information on safety, blueprint reading, and craft work processes. Manipulative projects provide students the opportunity to learn craft skills at their own pace in a mock job site setting. The Building Trades Lab is equipped with state-of-the-art power tools and places students in a competency-based setting where each individual learns skills by constructing manipulative projects. Mentored job experiences provide students the opportunity to apply learned skills as well as develop new skills while working under the guiding supervision of skilled contractors on job sites around North Iowa.

Graduating students are eligible to compete for a \$500 scholarship awarded each semester by the Contractors' Advisory Association and the North Iowa Area Builders Exchange. The Contractors' Advisory Association has also created a financial assistance agreement to enable a contractor to repay a portion of a student's educational costs after the student has completed the program requirements. In exchange for a commitment to work for a Contractors' Advisory Association member contractor after graduation, a student may receive full or partial tuition assistance from the contractor. A diploma will be awarded upon successful completion of the prescribed curriculum with a grade point average of 2.00 (C) or better.

SCHEDULE

First Term (Summer)

91:101 Career Math I	4 s.h.
91:151 Fundamentals of Carpentry I	3 s.h.
91:152 Fundamentals of Carpentry II	3 s.h.
89:100 Cooperative Work Experience	1 s.h.
	11 s.h.

Second Term (Fall)

89:150 Employment Strategies	1 s.h.
91:153 Carpentry I	4 s.h.
91:154 Carpentry I Lab	4 s.h.
91:102 Career Math II	4 s.h.
91:159 Intro to the PC	1 s.h.
95:130 Communications I	3 s.h.
89:100 Cooperative Work Experience	1 s.h.
	18 s.h.

Third Term (Spring)

15:241 Human Relations	3 s.h.
91:156 Carpentry II	4 s.h.
91:157 Carpentry II Lab	4 s.h.
91:198 Blueprint Reading and Estimating	3 s.h.
96:150 Career Physics	4 s.h.
89:100 Cooperative Work Experience	1 s.h.
	19 s.h.

Total Hours

48 s.h.

Building Trades - Evening

The evening Building Trades Program is designed for individuals interested in completing the first term diploma carpentry course requirements of the daytime program, or for those individuals interested in gaining some basic carpentry skills. Students choosing to complete the first term carpentry diploma course requirements need to complete Fundamentals of Carpentry I and Fundamentals of Carpentry II. Students seeking to gain carpentry experience may elect to enroll in a semester length class, or they may take individual skill modules. Enrollment in individual carpentry skill modules is available through the NIACC Continuing Education office on an open entry/open exit basis to accommodate flexible scheduling.

You may work during the day and attend classes in the evening. Evening carpentry classes are designed to be hands-on, self-paced, and individualized. Classes are three hours in length and are offered two evenings per week during the semester. Students completing the evening program may begin the daytime Building Trades diploma program in the second term (fall semester) having already completed the summer term courses.

You may also enroll in Cooperative Work Experience and receive college credit for related work experience.

SCHEDULE

First Term (Fall)

91:151 Fundamentals of Carpentry I	3 s.h.
89:100 Cooperative Work Experience	1 s.h.
	4 s.h.

Second Term (Spring)

91:152 Fundamentals of Carpentry II	3 s.h.
89:100 Cooperative Work Experience	1 s.h.
	4 s.h.

Total Hours

8 s.h.

**Course Descriptions -
Building Trades**

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

89:100A Cooperative Work Experience (1 s.h.) Practical training on the job under the cooperative supervision of the college and work supervisor. (15-45)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

91:101 Career Math I (4 s.h.) This course is intended to provide the student with mathematics topics and applications having specific emphasis to Automotive, Building Trades, Climate Control Technology, General Machinist, and Tool & Die Technology. Topics include basic mathematical operations, formulas, and multi-dimensional measurement and calculation. (60-0)

91:102 Career Math II (4 s.h.) This course is a continuation of Career Math I. Additional topics include geometry, trigonometry and descriptive statistics with an emphasis on application. (60-0)

91:151 Fundamentals of Carpentry I (3 s.h.) (15-60)

91:152 Fundamentals of Carpentry II (3 s.h.) (15-60)
General skills instruction covers safety; basic hand tools; basic power tools; job site safety; print reading; construction materials and systems; construction fasteners and processes; residential construction practices; and commercial construction practices.

91:153 Carpentry I (4 s.h.) (60-0)

91:154 Carpentry I Lab (4 s.h.) (0-210)
General skills instruction covers safety; hand tools; power tools; print reading; builders level, transit, and laser; scaffolding; rigging; arc welding, cutting, and burning. Residential skills instruction covers site work; building layout; form work; floor and sill framing; wall and ceiling framing; roof framing; stair construction; exterior walls, soffits, and cornice construction; roof coverings; window and door installation; cabinet fabrication; and running trims and hardware installations.

91:156 Carpentry II (4 s.h.) (60-0)

91:157 Carpentry II Lab (4 s.h.) (0-210)
General skills instruction covers safety; hand tools; power tools; print reading; builders level, transit, and laser; scaffolding; rigging; arc welding, cutting, and burning. Commercial skills instruction covers site work;

building layout; footing, wall, stair, column, beam, and deck form constructions; wood and steel stud framing; exterior walls and canopy constructions; cabinet fabrication; wood and steel jamb, window, door, millwork, and hardware installations; office partition, and acoustical ceiling installations.

91:198 Blueprint Reading and Estimating (3 s.h.) Residential and commercial blueprint reading and materials estimating covers understanding drawings, the language of construction. Students learn how to gather and use information from prints and drawings to estimate quantities of materials and perform construction work processes. (45-0)

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

96:150 Career Physics (4 s.h.) Prerequisite/Corequisite: one semester of Career Math. An introduction to basic operating principles of gears, levers, pulleys, simple machines, and the effects of heat on solids, liquids, and gases. (45-30)

91:159 Intro to the PC (1 s.h.) The course presents an introduction to the desktop PC, its parts and basic operation. The student learns how to operate the computer, work within the windows environment, and manipulate files. Course exercises will include using a word processing program, sending E-mail, and exploring the Intranet. (10-20)

Climate Control

(Residential/Commercial Heating and Air-Conditioning)

Today's climate control technician installs, maintains, analyzes, and modifies heating and air-conditioning systems.

The Climate Control curriculum provides opportunities to develop the skills necessary for entry into the HVAC (heating, ventilation, air-conditioning) industry.

The Climate Control curriculum allows students to choose between completing a program in Climate Control Mechanics, which leads to a diploma with an emphasis in residential heating and air-conditioning or a program in Climate Control Technology, which leads to an associate in applied science degree with an emphasis in commercial heating and air-conditioning. Both programs are designed around a common group of courses. A diploma will be awarded upon successful completion of the prescribed curriculum with a grade point average of 2.00 (C) or better. This recognition is granted to a person who has completed at least thirty (30) semester hours of credit.

ENTRANCE ADVISING

Due to the highly technical nature of this program and NIACC's commitment to giving students the best possible opportunity for success, students will be scheduled for advisement sessions with counselors and program personnel. In these sessions, the student's career plans, previous background, transcripts, test scores, life experiences, and motivation will aid in designing a positive educational experience.

Climate Control Mechanics

The Climate Control Mechanics diploma program is designed to provide graduates with the basic knowledge and skills necessary for installing and servicing residential heating and air-conditioning systems. Theory of operation, as well as installation and service techniques, for several types of residential heating and air-conditioning systems is covered.

Completion of this program prepares graduates to enter the Climate Control Technology degree program or to enter the following occupations:

- * Residential heating/air-conditioning service mechanic
- * Heating/air-conditioning installer
- * Heating/air-conditioning parts salesperson

SUGGESTED SCHEDULE

First Term

91:101 Career Math I	4 s.h.
95:130 Communications I.....	3 s.h.
96:128 Residential Heating Systems	4 s.h.
96:129 Troubleshooting Heating Systems	3 s.h.
96:132 Electrical Concepts.....	3 s.h.
	17 s.h.

Second Term

89:150 Employment Strategies	1 s.h.
91:102 Career Math II	4 s.h.
96:134 Air-Conditioning Principles	2 s.h.
96:138 Residential Air-Conditioning Systems	4 s.h.
96:139 Troubleshooting Air-Cond. Systems.....	3 s.h.
96:150 Career Physics	4 s.h.
	18 s.h.
Total Hours	35 s.h.

Climate Control Technology

The Climate Control Technology Program prepares students for entry into the commercial and industrial heating, ventilation, and air-conditioning industry.

The program does this by training the student in the following areas: designing, testing, troubleshooting, and servicing residential, commercial, institutional, and industrial heating, ventilation, and air-conditioning systems.

Special emphasis is placed on energy conservation and energy management. Students in the Climate Control Technology Program supplement their first year mechanics curriculum with specialty courses in the third and fourth terms that prepare graduates to enter the following occupations:

- * Commercial heating/air-conditioning service technician
- * Heating/air-conditioning lab technician
- * Heating/air-conditioning sales engineer
- * Heating/air-conditioning parts manager
- * Manufacturer's field service representative

SUGGESTED SCHEDULE

First Term

91:101 Career Math I	4 s.h.
95:130 Communications I.....	3 s.h.
96:128 Residential Heating Systems	4 s.h.
96:129 Troubleshooting Heating Systems	3 s.h.
96:132 Electrical Concepts.....	3 s.h.
	17 s.h.

Second Term

91:102 Career Math II	4 s.h.
96:134 Air-Conditioning Principles	2 s.h.
96:138 Residential Air-Conditioning Systems	4 s.h.
96:139 Troubleshooting Air-Cond. Systems.....	3 s.h.
96:150 Career Physics	4 s.h.
	17 s.h.

Third Term

15:134 Computer Applications OR	
15:140 Intro to Computers and	
Information Systems.....	3 s.h.
91:124 Technical Graphics.....	2 s.h.
96:140 Metal Fabrication.....	2 s.h.
96:230 Commercial Heating Systems	5 s.h.
96:231 Advanced Control Systems	4 s.h.
	16 s.h.

Fourth Term

15:241 Human Relations.....	3 s.h.
89:150 Employment Strategies	1 s.h.
95:131 Communications II.....	3 s.h.
96:232 Air Distribution.....	3 s.h.
96:234 Commercial Air-Conditioning Systems	5 s.h.
96:235 Energy Management.....	3 s.h.
	18 s.h.
Total Hours	68 s.h.

Course Descriptions - Climate Control Mechanics and Climate Control Technology

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, data base management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

91:101 Career Math I (4 s.h.) This course is intended to provide the student with mathematics topics and applications having specific emphasis to Automotive, Building Trades, Climate Control Technology, General Machinist, and Tool & Die Technology. Topics include basic mathematical operations, formulas, and multi-dimensional measurement and calculation. (60-0)

91:102 Career Math II (4 s.h.) This course is a continuation of Career Math I. Additional topics include geometry, trigonometry and descriptive statistics with an emphasis on application. (60-0)

91:124 Technical Graphics (2 s.h.) Corequisite: 96:140, Metal Fabrication, and 96:230, Commercial Heating Systems. A development of the skills of interpreting machine/system drawings, including mechanical, hydraulic, pneumatic layouts. Electronic circuit drawing, terms, symbols, and standards. Use of templates with printed circuits, schematic diagrams, and sketching. (30-0)

91:299A-D Special Problems in Career Programs (1-4 s.h.) Course arranged with special permission of instructor and Division Chair. Credit is based on standard contact hours and assigned by Division Chair and approved by Vice President for Academic Affairs. Course may be repeated for credit.

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

95:131 Communications II (3 s.h.) Further study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

96:128 Residential Heating Systems (4 s.h.) Corequisite: 96:132, Electrical Concepts, or instructor's permission. The purpose of this course is to introduce the student to the various types of residential heating systems. Areas and concepts covered include combustion theory, basic air distribution, furnace construction, filters, humidifiers, installation techniques, and maintenance procedures. (30-105)

96:129 Troubleshooting Heating Systems (3 s.h.) Prerequisite: 96:132, Electrical Concepts, or instructor's permission. The purpose of this course is to introduce the student to the fundamentals of troubleshooting by utilizing a practical and systematic approach to locate and repair heating system malfunctions. The student will also have the opportunity to study, in detail, the motors and controls used in today's heating systems. Topics to be covered include basic electric circuits, electrical test meters, motors and controls, diagnosis of electrical and mechanical malfunctions, and special emphasis on writing diagrams. (15-90)

96:132 Electrical Concepts (3 s.h.) The purpose of this course is to acquaint the student with electrical fundamentals. It will provide basic electrical and electronic background for a variety of technical fields which require such knowledge. Areas of instruction include safety, direct and alternating current, semiconductor and digital electronics, motors and controls, shop and lab practices. (30-45)

96:134 Air-Conditioning Principles (2 s.h.) A study of the theory of air-conditioning. Includes psychometrics, heat gain/loss problems, and equipment sizing. (15-45)

96:138 Residential Air-Conditioning Systems (4 s.h.) Prerequisite: 96:132, Electrical Concepts, or instructor's permission. The purpose of this course is to introduce the student to the various types of residential air-conditioning and heat pump systems. Areas and concepts covered include refrigeration, air-conditioning, heat pump theory, heat pump construction, installation techniques, and maintenance procedures. (30-105)

96:139 Troubleshooting Air-Conditioning Systems (3 s.h.) Prerequisite: 96:132, Electrical Concepts, or instructor's permission. The purpose of this course is to introduce the student to the fundamentals of troubleshooting by utilizing a practical and systematic approach to locate and repair air-conditioning and heat pump system malfunctions. The student will also have the opportunity to study, in detail, the motors and controls used in today's air-conditioning and heat pump systems. Topics to be covered include basic electric circuits, electrical test meters, motors and controls, diagnosis of electrical and mechanical malfunctions, and special emphasis on wiring diagrams. (15-90)

96:140 Metal Fabrication (2 s.h.) Corequisite: 91:124, Tech Graphics, and 96:230, Commercial Heating Systems. Use of selected sheet metal tools, layout, cutting, forming, and assembly of sheet metal as well as soldering and brazing processes. (15-45)

96:150 Career Physics (4 s.h.) Prerequisite/Corequisite: one semester of Career Math. An introduction to basic operating principles of gears, levers, pulleys, simple machines, and the effects of heat on solids, liquids, and gases. (45-30)

96:230 Commercial Heating Systems (5 s.h.) Prerequisite: 96:128, Residential Heating Systems, or instructor's permission. This course covers large heating systems used in commercial, institutional, and industrial applications. Types of equipment include hot water and low-pressure steam boilers and rooftop heating units. (30-135)

96:231 Advanced Control Systems (4 s.h.) Prerequisite: 96:129, Troubleshooting Heating Systems; and 96:139, Troubleshooting Air-Conditioning Systems, or instructor's permission. Major emphasis is on four basic types of control systems: pneumatic, electronic, electro mechanical, and digital as applied to large heating and air-conditioning applications. (30-120)

96:232 Air Distribution (3 s.h.) Prerequisite: 96:134, Air-Conditioning Principles, or instructor's permission. A study of the construction and design of duct work and related duct fittings. Includes correct layout and sizing of ducts, return and supply grills, and use of airflow measuring instruments. (30-60)

96:234 Commercial Air-Conditioning Systems (5 s.h.) Prerequisite: 96:138, Residential Air-Conditioning Systems, or instructor's permission. This course covers large cooling systems used in commercial, institutional, and industrial applications. Types of equipment include water chillers, multistage reciprocating units, and an introduction to absorption systems. (30-135)

96:235 Energy Management (3 s.h.) Prerequisite/Corequisite: 96:231, Advanced Control Systems, or instructor's permission. This course is designed to examine the consumption of energy in commercial and industrial buildings and how energy usage may be reduced. Topics include building design, load management, improving equipment efficiency, improved lighting systems, utility rate structures, and energy management control systems. (30-60)

Quotable Quote:

The great thing in this world is not so much where we stand as in what direction we are moving.

-Oliver Wendell Homes, Sr.

Electromechanical Systems Technology

Electromechanical Systems Technology is an associate in applied science degree program designed to prepare the graduate for immediate employment as electronic maintenance personnel in manufacturing settings and with manufacturers of electronic equipment.

ACCREDITATION

The Electromechanical Systems Technology Program is fully accredited by the National Association of Industrial Technology (NAIT). This is your guarantee that these programs have attained the highest standards and remain committed to providing you with the best education possible.

CERTIFICATIONS

Graduates of the Electromechanical Systems Technology Program are automatically eligible for recognition as a Certified Industrial Technologist (CIT) by the National Association of Industrial Technology (NAIT). Applicable fees are paid by the graduate if certification is desired. Students may also earn recognition as a Certified Electronic Technician Associate Level (CETa) by the Electronics Technicians Association (ETA). To earn such recognition, the student must pass the National Certified Electronics Technician Exam which is required of all program completers. These certifications are additional evidence to you and potential employers of NIACC's commitment to your success.

ENTRANCE ADVISING

Due to the highly technical nature of these programs and NIACC's commitment to giving students the best possible opportunity for success, students will be scheduled for advisement sessions with counselors and program personnel. In these sessions, the student's career plans, previous educational background, transcripts, test scores, life experiences, and motivation will aid in designing a positive educational experience.

COLLEGE TRANSFER OPTION

Through an articulation agreement with the University of Northern Iowa, graduates may continue their education by transferring to baccalaureate programs in such industrial technology fields as manufacturing, electro mechanical systems, engineering technology, or supervision and management. Help of a NIACC counselor or program instructor is required.

ENTRANCE REQUIREMENTS

1. Two years of high school algebra or applied math with a grade of "C" or better, OR
2. College Intermediate Algebra or equivalent with a grade of "C" or better, OR
3. COMPASS algebra test of 76 or higher.

Classes may be scheduled to accommodate the part-time student with the help of a counselor or program instructor.

Graduates of the Electromechanical Systems Technology Program may find work in the following occupations:

- *Electronics technician
- *Industrial process technician
- *Industrial maintenance technician
- *Instrumentation technician
- *Electro mechanical technician
- *Control systems technician
- *Computer automated process control technician

Special Program Requirements

As part of the requirements for graduation, students are required to take the Certified Electronics Technology (CET) Exam during their fourth semester. The cost (\$50) for the exam is the student's responsibility. Students are required to complete a minimum of 12 semester hours of their technical core course work for the Electromechanical Systems Technology Program at North Iowa Area Community College.

MULTIPLE ENTRY/MULTIPLE EXIT COURSE ENROLLMENT RULES

Six courses in the Electromechanical Systems Technology program are offered in an instructor supervised/student-paced format and may be enrolled in and started up to eleven weeks after the normal start of a semester. The courses are broken into two groups based on their being offered in either the fall or spring semester.

Group 1 Courses: 91:104 Intro to Tech Computing and CAD, 91:175 DC/AC Theory, and 96:132 Electrical Concepts.

These courses are offered in the fall semester and require an average time of 75 hours to complete. Students work at their own pace with close instructor supervision. Some students may require more time to complete all course work and students should monitor their own progress to assure they have adequate time to complete the course by the end of the fall semester.

A student may enroll in all three courses if done so by the end of the first week of the fall semester. After week 1 and before week 6, a student may enroll in no more than two of these courses. After week 6 and before week 11, a student may enroll in one course only.

Group 2 Courses: 91:179 Electronic Devices and Circuits, 91:214 Digital Electronics, 91:105 Motors, Controls, & Industrial Wiring.

These courses are offered in the spring semester. 91:179 Electronic Devices and Circuits and 91:214 Digital Electronics require an average time of 75 hours to complete. 91:105 Motors, Controls, & Industrial Wiring requires an average of 105 hours to complete. Students work at their own pace with close instructor supervision. Some students may require more time to complete all course work and students should monitor their own

progress to assure that they have adequate time to complete the course by the end of spring semester.

A student may enroll in all three courses if done so by the end of the first week of the spring semester. After week 1 and before week 6, a student may enroll in no more than two of these courses. After week 6 and before week 11, a student may enroll in one course only.

SUGGESTED SCHEDULE

First Term

91:104 Intro to Tech Computing & CAD	3 s.h.
91:107 Technical Mathematics I OR	4 s.h.
40:151 College Alg & Trig I (4 s.h.)	
91:175 DC/AC Theory	3 s.h.
95:130 Communications I OR	3 s.h.
30:101 Comm Skills I (3 s.h. or 4 s.h.)	
96:132 Electrical Concepts.....	3 s.h.
	16 s.h.

Second Term

91:105 Motors, Controls & Industrial Wiring.....	4 s.h.
91:108 Technical Mathematics II OR	4 s.h.
40:152 College Alg & Trig II (4 s.h.)	
91:179 Electronic Devices & Circuits	3 s.h.
91:214 Digital Electronics.....	3 s.h.
95:131 Communications II OR	3 s.h.
30:102 Comm Skills II (3 s.h. or 4 s.h.)	
96:156 Maintenance Shop Operations.....	3 s.h.
	20 s.h.

Summer Term

91:110 Electronics Tech Internship.....	2 s.h.
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Third Term

91:204 Advanced Control Systems	5 s.h.
91:210 Technical Physics I OR	4 s.h.
70:280 General Physics I (4 s.h.) OR	
70:122 Prin of Physics (4 s.h.) OR	
70:140 Introductory Chemistry (4 s.h.)	
92:118 Fluid Power	3 s.h.
96:157 Servos and Drives	3 s.h.
Elective	3 s.h.
Recommended: 40:240 Calculus For Business (3 s.h.)	
	18 s.h.

Fourth Term

15:241 Human Relations OR	3 s.h.
80:101 General Psychology (3 s.h.)	
89:150 Employment Strategies	1 s.h.
91:206 Computer Automated Manufacturing	3 s.h.
91:207 Instrumentation Technology	3 s.h.
91:211 Technical Physics II OR	4 s.h.
70:281 Gen Physics II (4 s.h.) OR	
70:122 Prin of Physics (4 s.h.) OR	
70:140 Introductory Chemistry (4 s.h.)	
96:155 Facilities Maintenance.....	3 s.h.
91:289 Certified Electronics Tech Exam Elective (2 s.h.)	

17 s.h.
Total Hours **73 s.h.**

Course Descriptions -

Electromechanical Systems Technology

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:101C Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on

language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102C Communication Skills II (3 s.h.) Prerequisite: 30:101C, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

40:151 College Algebra & Trigonometry I (4 s.h.) Prerequisite: Two years of high school algebra with a "C" or higher or 40:120, Intermediate Algebra, with a "C" or higher. This course is intended for students majoring in business, social science, biological sciences, liberal arts, and those mathematics students with insufficient background to begin the study of calculus and feel they cannot keep up the pace of Precalculus. Topics include review of algebraic operations, field properties, introduction to plane analytic geometry, including points and lines, functions of various types such as polynomials and their graphs, operations with complex numbers, and circular functions. (60-0)

40:152 College Algebra & Trigonometry II (4 s.h.) Prerequisite: 40:151, College Algebra & Trigonometry I. This course is a continuation of 40:151. Topics include the further study of trigonometric functions including their applications and inverses, study of vectors, complex numbers, DeMoivre's Theorem, systems of equations and inequalities, matrices, conic sections, parametric and polar equations, probability, sequences and series, and the Binomial Theorem. (60-0)

40:240 Calculus for Business (3 s.h.) Prerequisite: 40:161, Precalculus, or equivalent. This course uses calculus techniques with an emphasis on applications. Topics include derivatives and their uses, exponential and logarithmic functions, integration and its applications. A graphing calculator is required. (45-0)

70:122 Principles of Physics (4 s.h.) Prerequisite: 40:120, Intermediate Algebra or equivalent. An introductory level, one-term course. Major topics are measurement, matter in motion, heat, wave motion, electricity and magnetism, and modern physics. (45-30)

70:140 Introductory Chemistry (4 s.h.) Prerequisite: 40:060, Beginning Algebra, or equivalent. A first year college chemistry course which covers the concepts of chemistry. Among the topics included are systems of measurement, matter and energy, atomic theory, energy levels and atomic structure, the periodic table, ionic and covalent bonding, chemical equations, stoichiometry, acids and bases, states of matter, solutions, and redox. Lab experiments are performed and

complement the classroom theory. Not accepted as a prerequisite for other advanced chemistry courses except 70:273, Organic Chemistry. (45-30)

70:280 General Physics I (4 s.h.) Prerequisite: 40:151, College Algebra & Trigonometry, or equivalent. Mechanics, simple harmonic motion, waves, and fluids. Designed for students in pharmacy, medicine, dentistry, and professional fields other than engineering. Liberal arts students with an interest in science may elect this course. (45-30)

70:281 General Physics II (4 s.h.) Prerequisite: Math, 40:151, College Algebra & Trigonometry, or equivalent, and 70:280, General Physics I, or equivalent algebra-based first semester physics course as approved by the instructor. A continuation of 70:280, thermodynamics, electricity and magnetism, DC and AC circuits, optics, and atomic physics. (45-30)

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to coenroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

91:104 Introduction to Technical Computing and Computer-Aided Drafting (3 s.h.) Prerequisite/Corequisite: Ability to key-enter the equivalent of 25 words/minute at a computer keyboard. Introduction to Technical Computing and CAD is designed to familiarize the student with microcomputer basics relating to occupations in the industrial/technical area. Topics include computer hardware, operating systems, commands and tasks, disk organization and access, word processing, spreadsheets, and two-dimensional computer-aided drafting (CAD). Multiple entry/multiple exit enrollment. See Electromechanical Systems Technology Multiple Entry/Multiple Exit Course Enrollment rules on page 112. (15-60)

91:105 Motors, Controls, and Industrial Wiring (4 s.h.) Prerequisite: 91:175, DC/AC Theory. Introduction to industrial electrical motor and control circuitry. Emphasis placed on AC single- and three-phase circuit and transformer theory and industrial applications. Applications include various types of control elements. Study of the National Electrical Code as it pertains to manufacturing/industrial environment. Fundamental skills in electrical wiring and raceway techniques are learned through lab and/or project exercises. Multiple entry/multiple exit enrollment. See Electromechanical Systems Technology Multiple Entry/Multiple Exit Course Enrollment rules on page 112. (30-75)

91:107 Technical Mathematics I (4 s.h.) Prerequisite: One year of high school algebra or consent of instructor. This course provides an integrated approach to mathematics designed to provide principles of measured data, engineering procedures, basic algebra, geometry, right and oblique triangle trigonometry, logarithms, and elementary vectors. Practical mathematics is emphasized. (60-0)

91:108 Technical Mathematics II (4 s.h.) Prerequisite: 91:107, Technical Mathematics I; or 40:151, College Algebra and Trigonometry I. This course is a continuation of Technical Mathematics I. Topics include advanced algebra, complex numbers, binary and hexadecimal numbers, trigonometric identities, and analytic geometry. Practical mathematics is emphasized. (60-0)

91:110 Electronics Tech Internship (2 s.h.) Prerequisite: sophomore status in the Electromechanical Systems Technology Program and permission of internship coordinator. Supervised work experience in a business or industry. Work must be related to the major field of study; i.e., electricity/electronics, industrial maintenance, installation or service of control systems, etc. (0-160)

91:175 DC/AC Theory (3 s.h.) Prerequisite/Corequisite: 96:132, Electrical Concepts and 91:107, Technical Mathematics I. Study of the nature of electricity involving both direct and alternating current. DC circuit analysis utilizing more advanced techniques such as: superposition, Thevenin's and Norton's theorems. AC circuit analysis involving RL, RC, and RLC circuits, inductive and capacitive reactances, resonance, and transformer fundamentals. Computer circuit simulation of both DC and AC circuits is stressed along with a continued application of electronic test equipment; oscilloscopes, meters, and power supplies found in laboratory environments. Multiple entry/multiple exit enrollment. See Electromechanical Systems Technology Multiple Entry/Multiple Exit Course Enrollment rules on page 112. (15-60)

91:179 Electronic Devices and Circuits (3 s.h.) Prerequisite/Corequisite: 91:175, DC/AC Theory and 91:107, Technical Mathematics I. Study of diodes, bipolar transistors and field effect transistors (JFETs and MOSFETs) as they are used in both AC and DC electronic circuits. Applications such as power supplies, switching circuits and amplifier circuits are covered. Advanced topics in electronic devices including operational amplifiers (op amps), active filters, thyristors, and voltage regulation are covered. Computer simulation of the devices under study is covered. Both circuit analysis and measurement techniques using meters and oscilloscopes are stressed. Multiple entry/multiple exit enrollment. See Electromechanical Systems Technology Multiple Entry/Multiple Exit Course Enrollment rules on page 112. (15-60)

91:204 Advanced Control Systems (5 s.h.) Prerequisite/Corequisite: 91:105, Motors, Controls, and Industrial Wiring. Introduction to programmable logic controllers (PLC's) using the Allen Bradley SLC500 and RS Logix 500 programming software, elementary ladder logic and external contact instructions, counters,

timers, program development techniques, and troubleshooting. Advanced topics in programmable logic controllers including program control instructions, math operations, analog I/O, sequencers, and data manipulation. Field wiring of PLCs to control devices using standardized practices. Motor control circuitry utilizing advanced control techniques, application of variable frequency drives for AC motors. Instrumentation programming with LabVIEW. Projects involving practical field devices and program development. (45-105)

91:206 Computer Automated Manufacturing (3 s.h.) Prerequisite/Corequisite: 92:118, Fluid Power; 91:204, Advanced Control Systems; and, 92:227, Automated Manufacturing Processes. Introduction to robotic fundamentals including the integration of robots, computers, and programmable logic controllers in the operation of a flexible manufacturing line (FML). Group dynamics, project structure, and troubleshooting techniques. (30-60)

91:207 Instrumentation Technology (3 s.h.) Prerequisite/Corequisite: 91:204, Advanced Control Systems. Modern instrumentation techniques as they apply to the manufacturing environment. Instrumentation amplifiers and linear integrated circuits for industrial applications. Industrial sensors, transducers, and related components. Industrial process control theory, telemetry, and data communication. A final group instrumentation project is required. (30-45)

91:210 Technical Physics I (4 s.h.) Prerequisite/Corequisite: 91:107, Technical Mathematics I; 40:151, College Algebra and Trigonometry I. This course presents traditional fields of physics such as measurement, mechanics, properties of matter, simple harmonic motion, and waves. Emphasis is placed on industrial and technical applications of physics. (45-30)

91:211 Technical Physics II (4 s.h.) Prerequisite/Corequisite: 91:107, Technical Mathematics I; 40:151, College Algebra and Trigonometry I, or an equivalent course in algebra and trigonometry. This course presents traditional fields of physics such as thermodynamics, electricity and magnetism, DC and AC circuits, and light. Emphasis is placed on industrial and technical applications of physics. (45-30)

91:214 Digital Electronics (3 s.h.) Prerequisite/Corequisite: 91:175, DC/AC Theory. Study of number systems related to digital circuits, Boolean Algebra/Karnaugh Maps. Combinational logic including AND, OR, NAND, NOR, NOT, and XOR. Combinational circuits decoders. Basic sequential elements including SR, D, JK, and Master-Slave flipflops. Sequential circuits including registers and counters. Memory circuits and applications. Analog to digital (A/D) and digital to analog (D/A) conversion, and elementary interfacing. Design, analysis, and computer simulation. Multiple entry/multiple exit enrollment. See Electromechanical Systems Technology Multiple Entry/Multiple Exit Course Enrollment rules on page 112. (15-60)

91:289 Certified Electronics Technician Exam Review (2 s.h.) Prerequisite/Corequisite: 91:207, Instrumentation Technology. Review of fundamental electrical and electronic circuits are preparation for the Associate Level Certified Electronic Technician Examination. Application specific topics in radio frequency (RF) communications. (30-0)

91:299A-D Special Problems in Career Programs (1-4 s.h.) Course arranged with special permission of instructor and Division Chair. Credit is based on standard contact hours as assigned by Division Chair and approved by the Vice President for Academic Affairs. Course may be repeated for credit.

92:118 Fluid Power (3 s.h.) Prerequisite/Corequisite: 91:107, Technical Mathematics I. Principles of fluid power pertaining to pressure, volume, and flow. Overview of hydraulic and pneumatic power generation, control transmission, and actuation devices. Computer design and simulation of fluid power circuits. Hands-on labs using practical fluid power equipment. (30-45)

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

95:131 Communications II (3 s.h.) Further study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

96:132 Electrical Concepts (3 s.h.) This course is an introductory survey of electricity and electronics suitable for students interested in pursuing a career in such technical fields as electronics, automotive, HVAC, and other fields that require knowledge of basic electrical/electronic concepts. Topics include safety, shop and lab practices, motors and controls, direct and alternating current, and semiconductor and digital electronics. Course work consists of problem solving, computer-aided instruction, computer simulation, and hands-on exercises with industrial grade equipment. Multiple entry/multiple exit enrollment. See Electromechanical Systems Technology Multiple Entry/Multiple Exit Course Enrollment Rules on page 112. (15-60)

96:155 Facilities Maintenance (3 s.h.) Prerequisite: 91:105, Motors, Controls, and Industrial Wiring. Overview of topics specific to maintenance of facilities. Topics include project estimating issues including installation, cost, and time. Practice reading building schematics and blueprints. Fundamentals of HVAC with lab exercises. Construction issues including sprinkler, electrical, and plumbing systems. General overview of facilities systems. (30-45)

96:156 Maintenance Shop Operations (3 s.h.) Introduction to shop equipment generally found in the industrial maintenance environment. Instruction and practice with metal saws, drills, grinders, elementary welding and cutting, thread repair, anchors and fasteners. Study of mechanical prints to identify parts in assembly and repair situations. Use of catalogs to find and order

repair parts, study of bearings and seals, applications, and failure analysis. (15-60)

96:157 Servos and Drives (3 s.h.) Study of direct and alternating current variable speed drives, closed loop control systems, and servo systems. Hands-on exercises provide experience with typical components and interconnections needed to implement various control systems. Concepts of system stability, frequency response, feedback, damping, position and speed control, and many others are covered. (30-45)

General Machinist

General Machinist is a two-semester diploma program designed to provide in-depth study and considerable hands-on skills in the machine processing of a variety of metals. This one-year program provides the foundation for the associate in applied science program, Tool and Die Technology.

Students become proficient in the operation of manual mills, lathes, grinders, drills, and saws as they complete increasingly complex projects while holding tight tolerances. Various pieces of precision measuring equipment (optical comparator, coordinate measuring machine, etc.) are used to check quality. Additional work in blueprint reading, heat-treating, and computer numerical controlled (CNC) machining is required to complete the General Machinist Program.

Upon satisfactory completion of this program, students are awarded a NIACC diploma. Program graduates have the option to continue into the A.A.S. Tool and Die Technology Program or immediately begin employment in an area machine shop or manufacturing facility producing a wide variety of machined parts.

ENTRANCE ADVISING

Due to the highly technical nature of this program and NIACC's commitment to giving students the best possible opportunity for success, students are scheduled for advisement sessions with counselors and program personnel. In these sessions, the student's career plans, previous background, transcripts, test scores, life experiences, and motivation aid in designing a positive educational experience.

SUGGESTED SCHEDULE

First Term

91:101 Career Math I	4 s.h.
95:130 Communications I.....	3 s.h.
96:162 Computer Orientation	1 s.h.
96:163 Blueprint Reading I.....	1 s.h.
96:165 Machine Tool Practices I.....	9 s.h.
	18 s.h.

Second Term

91:102 Career Math II	4 s.h.
96:150 Career Physics	4 s.h.
96:164 Blueprint Reading II.....	1 s.h.
96:166 Machine Tool Practices II.....	7 s.h.
96:167 Fundamentals of CNC.....	3 s.h.
	19 s.h.

Total Hours **37 s.h.**

Tool and Die Technology

Tool and Die Technology is a five-semester degree program which is a continuation of the General Machinist diploma program. The Tool and Die Technology Program builds upon the previous studies with an in-depth study of high-precision industrial dies and die components, progressive dies, and plastics industry molds. A portion of the program is devoted to producing computer-aided drawings (CAD) of molds and dies, and then using computer-aided manufacturing (CAM) software to generate CNC machine language. Students operate computer numerical controlled (CNC) machine tools to produce many of their second year projects.

Upon satisfactory completion of this program, students are awarded an associate in applied science degree. Program graduates are prepared to work in the "tool room" of area manufacturers or to work for a specialty tool and die shop producing dies and molds for a large variety of production machines in our area.

SUGGESTED SCHEDULE

First Term

91:101 Career Math I	4 s.h.
95:130 Communications I.....	3 s.h.
96:162 Computer Orientation	1 s.h.
96:163 Blueprint Reading I.....	1 s.h.
96:165 Machine Tool Practices I.....	9 s.h.
	18 s.h.

Second Term

91:102 Career Math II	4 s.h.
96:150 Career Physics	4 s.h.
96:164 Blueprint Reading II.....	1 s.h.
96:166 Machine Tool Practices II.....	7 s.h.
96:167 Fundamentals of CNC.....	3 s.h.
	19 s.h.

Third Term (Summer)

96:168 Fundamentals of Drafting	1 s.h.
96:170 Statistical Process Control (SPC).....	1 s.h.
96:171 Tool and Die Making I	5 s.h.
96:172 Fundamentals of EDM.....	2 s.h.
96:272 Computer-Aided Manufacturing (CAM) ..	3 s.h.
	12 s.h.

Fourth Term

15:241 Human Relations.....	3 s.h.
89:150 Employment Strategies	1 s.h.
96:169 Welding	2 s.h.
96:270 Computer-Aided Drafting (CAD).....	2 s.h.
96:271 Tool and Die Making II	8 s.h.
	16 s.h.

Fifth Term

95:131 Communications II.....	3 s.h.
96:273 Plastics Materials and Methods.....	1 s.h.
96:274 Mold Making I.....	9 s.h.
96:275 Advanced CNC & EDM	2 s.h.
	15 s.h.

Total Hours **80 s.h.**

Course Descriptions - General Machinist and Tool and Die

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

91:101 Career Math I (4 s.h.) This course is intended to provide the student with mathematics topics and applications having specific emphasis to Automotive, Building Trades, Climate Control Technology, General Machinist, and Tool & Die Technology. Topics include basic mathematical operations, formulas, and multi-dimensional measurement and calculation. (60-0)

91:102 Career Math II (4 s.h.) This course is a continuation of Career Math I. Additional topics include geometry, trigonometry and descriptive statistics with an emphasis on application. (60-0)

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

95:131 Communications II (3 s.h.) Further study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

96:150 Career Physics (4 s.h.) Prerequisite/Corequisite: one semester of Career Math. An introduction to basic operating principles of gears, levers, pulleys, simple machines, and the effects of heat on solids, liquids, and gases. (45-30)

96:162 Computer Orientation (1 s.h.) Introduction to basic computer hardware and software functions. Emphasis on using the computer as a tool to create personal and business documents. Introductory windows, word processing, spreadsheet, presentation, and Internet units give students an opportunity to view software capabilities and use some of the features, (15-15)

96:163 Blueprint Reading I (1 s.h.) An introduction to the importance of prints in industry. Covers isometric drawings, orthographic projection, auxiliary views, detail and assembly drawing, dimensions and tolerances,

and sectional views. Integrates the alphabet of lines and principles of sketching. Other information covered includes title blocks, drawing change systems, drawing notes, and material lists. (0-30)

96:164 Blueprint Reading II (1 s.h.) Prerequisite/Corequisite: 96:163, Blueprint Reading I. Continues Blueprint Reading I with emphasis on geometric dimensioning and tolerancing and the interpretation of more advanced prints used in the construction of tool and die and mold building. (0-30)

96:165 Machine Tool Practices I (9 s.h.) Prerequisite/Corequisite: 91:101, Career Math I; and 96:163, Blueprint Reading I. Covers theory and lab use of basic measuring and machining tools, layout inspection tools, as well as bench work. Safety is taught and enforced as it applies to each machine process. Proper terminology of the machinist trade is emphasized as well as following blueprints and holding tolerances through the use of a variety of machining processes to produce a product. (60-225)

96:166 Machine Tool Practices II (7 s.h.) Prerequisite/Corequisite: 96:165, Machine Tool Practices I and to be taken concurrently with 91:102, Career Math II; and 96:164, Blueprint Reading II. Continues Machine Tool Practices I. Covers more advanced principles in setup and operation of mills, lathes, and grinders, with an introduction to carbide tooling along with a continued emphasis on shop safety, communication, and cooperation. Stresses the interrelationship of manufactured mating parts. (45-195)

96:167 Fundamentals of CNC (3 s.h.) Prerequisite/Corequisite: 96:166, Machine Tool Practices II. Students must obtain a grade of "C" or better in 96:165, Machine Tool Practices I. Covers computer numerical control (CNC) as it relates to milling machines, turning lathes, microcomputers, and related software. Emphasis on input language, codes, machine set-up and operation, inspection of parts, and communication of peripherals. (30-30)

96:168 Fundamentals of Drafting (1 s.h.) Theory, technical skills, industrial applications, and practices of technical sketching, engineering lettering, selection and use of equipment, geometric construction, multi-views, and auxiliary views. (0-30)

96:169 Welding (2 s.h.) This is a basic arc/oxy-fuel welding and cutting course. The students learn introductory skills in SMAW, GTAW, and GMAW welding, oxy-acetylene welding, and oxy-fuel cutting. The students learn and understand safety procedures relating to subjects and shop safety in general. (15-30)

96:170 Statistical Process Control (SPC) (1 s.h.) Covers the current transformation methods of industry and business toward a complete quality control system. Management theory on quality, productivity, and controlled charting techniques are included. (15-0)

96:171 Tool and Die Making I (5 s.h.) Prerequisite/Corequisite: Students must obtain a grade of "C" or better in 96:167, Fundamentals of CNC, and 96:166,

Machine Tool Practices II. This course is an introduction to the design of industrial tools and machining characteristics of tool components. The student is introduced to additional machining skills that will be encountered in typical machine shops in the building of dies, jigs, fixtures, and precision machine parts. (30-160)

96:172 Fundamentals of EDM (2 s.h.) Prerequisite/Corequisite: 96:171, Tool and Die Making I. Students must obtain a grade of "C" or better in 96:167, Fundamentals of CNC. The students are introduced to the electrical discharge machines, both wire and ram-type. Emphasis on how these tools are used in the manufacturing of punch and die components and injection mold cores and cavities. (15-45)

96:192 Intro to Geometric Dimensioning and Tolerancing (2 s.h.) Begins with an introduction to the international engineering language, Geometric Dimensioning Tolerancing (GD&T). The students are taught to recognize the symbols and to understand the terms and rules used in GD&T, according to the American Society of Mechanical Engineers (ASME) Y 14.5M 1994 standards. The students then learn how to apply these symbols to the features of a part and provide a very concise and clear definition of design intent. (30-0)

96:270 Computer-Aided Drafting (CAD) (2 s.h.) Prerequisite/Corequisite: 96:168, Fundamentals of Drafting. Students are introduced to computer-aided drafting and design as an essential tool utilizing and enhancing the student's existing drafting skills. This is accomplished through the generation of two- and three-dimensional orthographic drawings as well as pictorial techniques in the CAD environment. Operating systems commands, cursor manipulation, direct display interaction, geometry creation and manipulation, file storage and retrieval, entity manipulation such as rotation and mirroring, and the use of output devices such as printers and plotters are just a few of the hardware and software capabilities to be covered. (15-30)

96:271 Tool and Die Making II (8 s.h.) Prerequisite/Corequisite: 96:171, Tool and Die Making I. This course is a continuation of Tool and Die Making I with instruction and practice in building a progressive or compound die. Emphasis is placed on the tool building procedures learned in Tool and Die I and toward fabricating dies. Instruction is given on the considerations involved in developing die components, such as calculation of die clearances, bend allowance, cutting forces, press tonnage requirements, and practice in building a complete functional die. (45-225)

96:272 Computer-Aided Manufacturing (CAM) (3 s.h.) Prerequisite/Corequisite: 96:171, Tool & Die Making I, and 96:172, Fundamentals of EDM. Students must obtain a grade of "C" or better in 96:167, Fundamentals of CNC. This program provides an introduction to (Process Modeling) utilizing the CNC graphics programming system. Using engineering drawings, students program various parts for CNC mills and CNC

lathes. Related topics include job planning, tool selection, construction of a process model, tool path verification, simulation, quality control, CAD, CAM data transfer, and CNC code generation. (15-60)

96:273 Plastic Materials and Methods (1 s.h.) This is a survey course designed to introduce the student to the field of plastics. This overview includes thermoplastics and thermoset materials along with the major processing methods being utilized by industry today. (15-0)

96:274 Mold Making I (9 s.h.) Prerequisite/Corequisite: 96:271, Tool and Die Making II; 96:273, Plastics Materials and Methods. The student is introduced to the field of mold making for plastic injection molds, blow molds, compression and transfer molds, zinc and aluminum die casting molds. Focus is placed on mold theory, mold repair, identification and correction of mold problems, standardization of mold components, mold blueprint reading, and the machine shop skills necessary for mold making, as related to thermoplastic injection molds. In addition the student develops necessary basic skills for gating, venting, heating, cooling, stoning and polishing as well as other hands-on experiences necessary to manufacture mold plates, cores, cavities, and ejection systems. The student builds a prototype injection mold. (45-285)

96:275 Advanced CNC & EDM (2 s.h.) Prerequisite/Corequisite: 96:274, Mold Making I. A continuation of CNC and EDM fundamentals as well as mold making with additional instruction and practice in the use of CAD, wire, and ram electrical discharge machines in the construction of die and mold components. (15-45)

General Machinist Evening

General Machinist is a two-semester diploma program designed to provide in-depth study and considerable hands-on skills in the machine processing of a variety of metals. This one-year program provides the foundation for the associate in applied science program, Tool and Die Technology.

Students become proficient in the operation of manual mills, lathes, grinders, drills, and saws as they complete increasingly complex projects while holding tight tolerances. Various pieces of precision measuring equipment (optical comparator, coordinate measuring machine, etc.) are used to check quality. Additional work in blueprint reading, heat-treating, and computer numerical controlled (CNC) machining is required to complete the General Machinist Program.

Upon satisfactory completion of this program, students are awarded a NIACC diploma. Program graduates have the option to continue into the A.A.S. Tool and Die Technology Program or immediately begin employment in an area machine shop or manufacturing facility producing a wide variety of machined parts.

ENTRANCE ADVISING

Due to the highly technical nature of this program and NIACC's commitment to giving students the best possible opportunity for success, students are scheduled for advisement sessions with counselors and program personnel. In these sessions, the student's career plans, previous background, transcripts, test scores, life experiences, and motivation aid in designing a positive educational experience.

SUGGESTED SCHEDULE

91:101 Career Math I	4 s.h.
91:102 Career Math II	4 s.h.
95:130 Communications I.....	3 s.h.
96:150 Career Physics	4 s.h.
96:162 Computer Orientation	1 s.h.
96:163 Blueprint Reading I.....	1 s.h.
96:164 Blueprint Reading II.....	1 s.h.
96:167 Fundamentals of CNC.....	3 s.h.
96:180 Survey of Machine Tool Practices I.....	4 s.h.
96:181 Survey of Machine Tool Practices II.....	4 s.h.
96:182 Survey of Machine Tool Practices III.....	4 s.h.
96:193 Capstone Manufacturing Project.....	4 s.h.
Total Hours	37 s.h.

Course Descriptions - General Machinist

91:101 Career Math I (4 s.h.) This course is intended to provide the student with mathematics topics and applications having specific emphasis to Automotive, Building Trades, Climate Control Technology, General Machinist, and Tool & Die Technology. Topics include basic mathematical operations, formulas, and multi-dimensional measurement and calculation. (60-0)

91:102 Career Math II (4 s.h.) This course is a continuation of Career Math I. Additional topics include geometry, trigonometry and descriptive statistics with an emphasis on application. (60-0)

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

96:150 Career Physics (4 s.h.) Prerequisite/Corequisite: one semester of Career Math. An introduction to basic operating principles of gears, levers, pulleys, simple machines, and the effects of heat on solids, liquids, and gases. (45-30)

96:162 Computer Orientation (1 s.h.) Introduction to basic computer hardware and software functions. Emphasis on using the computer as a tool to create personal and business documents. Introductory windows, word processing, spreadsheet, presentation, and Internet units give students an opportunity to view software capabilities and use some of the features, (15-15)

96:163 Blueprint Reading I (1 s.h.) An introduction to the importance of prints in industry. Covers isometric drawings, orthographic projection, auxiliary views, detail and assembly drawing, dimensions and tolerances, and sectional views. Integrates the alphabet of lines and principles of sketching. Other information covered includes title blocks, drawing change systems, drawing notes, and material lists. (0-30)

96:164 Blueprint Reading II (1 s.h.) Prerequisite/Corequisite: 96:163, Blueprint Reading I. Continues Blueprint Reading I with emphasis on geometric dimensioning and tolerancing and the interpretation of more advanced prints used in the construction of tool and die and mold building. (0-30)

96:167 Fundamentals of CNC (3 s.h.) Prerequisite/Corequisite: 96:166, Machine Tool Practices II. Covers computer numerical control (CNC) as it relates to milling machines, turning lathes, microcomputers, and related software. Emphasis on input language, codes, machine setup and operation, inspection of parts, and communication of peripherals. (30-30)

96:180 Survey of Machine Tool Practices I (4 s.h.) The student safely uses basic measuring tools, machine tools, and layout/inspection tools. Emphasis is on turning machines, drills, and hand tools. Safety is taught an enforced as it applies to each machine process. Proper terminology of the machinist trade is emphasized. The student follows blueprints to produce products within tolerances specified. (15-90)

96:181 Survey of Machine Tool Practices II (4 s.h.)

Continues Survey of Machine Tool Practices I. The student safely uses basic measuring tools, machine tools, and layout/inspection tools. Emphasis on basic milling machines. Safety is taught and enforced as it applies to each machine process. Proper terminology of the machinist trade is emphasized. The student follows blueprints to produce products within tolerances specified. (15-90)

96:182 Survey of Machine Tool Practices III (4 s.h.)

Prerequisite: 96:180, Survey of Machine Tool Practices I; 96:181, Survey of Machine Tool Practices II. The student safely performs cylindrical grinder and surface grinder operations. Using the grinders, the student makes round and flat surfaces to conform to the specified tolerances. Emphasis is placed on safety, proper use of tools, and using correct terminology of the machinist trade. (15-90)

96:193 Capstone Manufacturing Project (4 s.h.)

Prerequisite: 96:180, Survey of Machine Tool Practices I - Pass with a "C" or better; 96:181, Survey of Machine Tool Practices II - Pass with a "C" or better; 96:182, Survey of Machine Tool Practices III - Pass with a "C" or better; 96:167, Fundamentals of CNC - Pass with a "C" or better. The goal is for the learner to build an approved multiple-part project using machine tools and communicate the successes and difficulties encountered in the project-building process. (15-90)

Mechanical Design Technology

The Mechanical Design Technology curriculum provides opportunities to be productive immediately as a CAD drafter with the technical competence to keep abreast of developments in the field and allow greater potential for future advancement into design.

The NIACC Drafting Program includes instruction on Computer-Aided Design (CAD) equipment. The curriculum is designed to prepare the student to apply technical knowledge, methods, and skills in support of engineering activities while becoming proficient in CAD. The graduate is ready for immediate employment with manufacturers of various products such as farm and industrial machinery, consumer products, computers and control equipment, governmental agencies, and engineering firms.

New employees are usually assigned as CAD technicians, mechanical design drafters, CAD drafters, mechanical drafting, drafters, or designers. Upon completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded an associate in applied science degree. Some courses may be taken toward other associate degrees; check with a counselor.

ENTRANCE ADVISING

Due to the highly technical nature of these programs and NIACC's commitment to giving students the best possible opportunity for success, students will be scheduled for advisement sessions with counselors and program personnel. In these sessions, the student's career plans, previous educational background, transcripts, test scores, life experiences, and motivation will aid in designing a positive educational experience.

COLLEGE TRANSFER OPTION

Through articulation agreements with Iowa State University and the University of Northern Iowa, graduates may continue their education by transferring to baccalaureate programs in such fields as Industrial Technology, General Industry and Technology, or Manufacturing Technology. Help of a NIACC counselor or program instructor is required.

ENTRANCE REQUIREMENTS

1. Two years of high school algebra with a grade of "C" or better, OR
2. College Intermediate Algebra or equivalent with a grade of "C" or better, OR
3. COMPASS algebra test of 76 or higher.

Classes may be scheduled to accommodate the part-time student with the help of a counselor or program instructor. Students are required to complete 50 percent of their course work for the Mechanical Design Technology Program at North Iowa Area Community College.

SUGGESTED SCHEDULE

First Term

15:114 Computer Literacy	1 s.h.
15:241 Human Relations OR	3 s.h.
80:101 Gen Psychology (3 s.h.)	
90:121 Intro to Drafting.....	3 s.h.
90:122 Drafting.....	3 s.h.
91:107 Technical Mathematics I OR	4 s.h.
40:151 College Alg & Trig I (4 s.h.)	
91:120 Manufacturing Processes I.....	2 s.h.
95:130 Communications I OR	3 s.h.
30:101 Comm Skills I (3 s.h. or 4 s.h.)	

19 s.h.

Second Term

90:131 Drafting II.....	7 s.h.
91:108 Technical Mathematics II OR	4 s.h.
40:152 College Alg & Trig II (4 s.h.)	
91:121 Manufacturing Processes II.....	2 s.h.
91:150 Statics.....	2 s.h.
95:131 Communications II OR	3 s.h.
30:102 Comm Skills II (3 s.h. or 4 s.h.)	

18 s.h.

Third Term

91:109 Technical Mathematics III OR	3 s.h.
40:240 Calculus For Business (3 s.h.)	
91:210 Technical Physics I OR	4 s.h.
70:280 General Physics I (4 s.h.) OR	
70:122 Principles of Physics (4 s.h.) OR	
70:140 Introductory Chemistry (4 s.h.)	
91:226 Fundamentals of Unigraphics.....	4 s.h.
91:227 Fundamentals of Pro Engineering.....	4 s.h.
91:251 Strength of Materials	3 s.h.

18 s.h.

Fourth Term

89:150 Employment Strategies	1 s.h.
90:231 Machine Element Design	9 s.h.
91:211 Technical Physics II OR	4 s.h.
70:281 General Physics II (4 s.h.) OR	
70:122 Principles of Physics (4 s.h.) OR	
70:140 Introductory Chemistry (4 s.h.)	
91:212 Design Research Laboratory.....	2 s.h.
91:240 Fluid Mechanics	3 s.h.

19 s.h.

Total Hours

74 s.h.

Course Descriptions - Mechanical Design Technology

15:114 Computer Literacy (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. Introduction to basic computer hardware and software functions. Emphasis on using the computer as a tool to create personal and business documents. Introductory windows, word processing, spreadsheet, and presentation units give students an opportunity to view software capabilities and use some of the features. Students with little or no computer background are encouraged to take this course. (0-30)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:101C Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102C Communication Skills II (3 s.h.) Prerequisite: 30:101C, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

40:151 College Algebra & Trigonometry I (4 s.h.) Prerequisite: Two years of high school algebra with a "C" or higher or 40:120, Intermediate Algebra, with a "C" or higher. This course is intended for students majoring in business,

social science, biological sciences, liberal arts, and those mathematics students with insufficient background to begin the study of calculus and feel they cannot keep up the pace of Precalculus. Topics include review of algebraic operations, field properties, introduction to plane analytic geometry, including points and lines, functions of various types such as polynomials and their graphs, operations with complex numbers and circular functions. (60-0)

40:152 College Algebra & Trigonometry II (4 s.h.) Prerequisite: 40:151, College Algebra & Trigonometry I. This course is a continuation of 40:151. Topics include further study of functions, inverse functions, study of vectors, complex numbers, DeMoivre's theorem, solution of systems of equations, matrices, solid analytical geometry, probability, sequences and series, logarithmic, and exponential functions. (60-0)

40:240 Calculus for Business (3 s.h.) Prerequisite: 40:161, Precalculus, or equivalent. This course uses calculus techniques with an emphasis on applications. Topics include derivatives and their uses, exponential and logarithmic functions, integration and its applications. A graphing calculator is required. (45-0)

70:122 Principles of Physics (4 s.h.) Prerequisite: 40:120, Intermediate Algebra; or equivalent. An introductory level, one-term course. Major topics are measurement, matter in motion, heat, wave motion, electricity and magnetism. (45-30)

70:140 Introductory Chemistry (4 s.h.) Prerequisite: 40:060, Beginning Algebra, or equivalent. A first-year college chemistry course which covers the concepts of chemistry. Among the topics included are systems of measurement, matter and energy, atomic theory, energy levels and atomic structure, the periodic table, ionic and covalent bonding, chemical equations, stoichiometry, acids and bases, states of matter, solutions, and redox. Lab experiments are performed and complement the classroom theory. Not accepted as a prerequisite for other advanced chemistry courses except 70:273, Organic Chemistry. (45-30)

70:280 General Physics I (4 s.h.) Prerequisite: 40:151, College Algebra & Trigonometry, or equivalent. Mechanics, simple harmonic motion, waves, and fluids. Designed for students in pharmacy, medicine, dentistry, and professional fields other than engineering. Liberal arts students with an interest in science may elect this course. (45-30)

70:281 General Physics II (4 s.h.) Prerequisite: Math; 40:151, College Algebra & Trigonometry, or equivalent, and 70:280, General Physics I, or equivalent algebra-based first semester physics course as approved by the instructor. A continuation of 70:280, thermodynamics, electricity and magnetism, DC and AC circuits, optics, and atomic physics. (45-30)

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to coenroll in College Reading Skills (30:120). Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration

and conflict; the learning process, intelligence, perception, and mental health. (45-0)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:121 Introduction to Drafting (3 s.h.) Fundamentals of AutoCAD; layers, icons, pull-down menu, drawing and editing commands, object snaps, screen menu, filters, text, sketch, basic construction of 2D mechanical drawings. Use of board equipment and instruments, lettering, basic geometric construction, and sketching fundamentals. (30-90)

90:122 Drafting (3 s.h.) Prerequisite: 90:121, Intro to Drafting. A continuation of AutoCAD and drafting fundamentals; multi view projections, rays, construction lines, auxiliaries, isometric drawings, theory of orthographic projection: points, lines, planes, and auxiliaries. (30-90)

90:131 Drafting II (7 s.h.) Prerequisite: 90:121, Intro to Drafting; and 90:122, Drafting. AutoCAD 2D Fundamentals; array dimensioning (basic, intermediate, advanced), tolerancing, sections, threads and fasteners, editing using grips, display options, editing polylines and splines, blocks, viewports, attributes, bill of materials, and assemblies. (60-195)

90:231 Machine Element Design (9 s.h.) Prerequisite: 91:150, Statics; 91:226, Fundamentals of Unigraphics; and 91:227, Fundamentals of ProEngineer; Corequisite: 91:212, Design Research Laboratory. Combines basic graphical and mathematical analysis of linkages, gears, and cams; design optimization utilizing spreadsheets as mathematical models to simulate geometric and kinematic relationships; construction of 3D parametric models including assembly implementation to create a set of working drawings including details, parts lists, and specifications; usage of handbooks and suppliers' catalogs. (60-210)

91:107 Technical Mathematics I (4 s.h.) Prerequisite: One year of high school algebra or consent of instructor. This course provides an integrated approach to mathematics designed to provide principles of measured data, engineering procedures, basic algebra, geometry, right and oblique triangle trigonometry, logarithms, and elementary vectors. Practical mathematics is emphasized. (60-0)

91:108 Technical Mathematics II (4 s.h.) Prerequisite: 91:107, Technical Mathematics I; or 40:151, College Algebra and Trigonometry I. This course is a continuation of Technical Mathematics I. Topics include advanced algebra, complex numbers, binary and hexadecimal numbers, trigonometric identities, and analytic geometry. Practical mathematics is emphasized. (60-0)

91:109 Technical Mathematics III (3 s.h.) Prerequisite: 91:108, Technical Mathematics II; or equivalent. Basic Calculus: provides manipulative skills of calculus and basic theory. Includes functions, limits, definitions, fundamental theorem, derivatives, transcendental functions, integral techniques, definite integrals, and basic applications. (45-0)

91:120 Manufacturing Processes I (2 s.h.) Knowledge and skills in manufacturing materials and the procedures used to produce products in today's modern industry. Introduction to measurement and quality assurance with an emphasis on tolerances, measurement, and calibration. Final project, create a product using manual metal cutting processes. (15-30)

91:121 Manufacturing Processes II (2 s.h.) Prerequisite: 91:120, Manufacturing Processes I. Automation methods using (CNC) Computer Numerical Control, (CAD) Computer-Aided Design, (CAM) Computer-Aided Manufacturing and the integration of these technologies, (CIM) Computer Integrated Manufacturing, and (FMS) Flexible Manufacturing Systems. Final project, create a product using CAD, CAM, and CNC. (15-30)

91:150 Statics (2 s.h.) Prerequisite/Corequisite: 91:108, Technical Mathematics II. Provides the theory and practical background for analysis of the forces acting upon an object in equilibrium. The following are stressed: resultant and equilibrium of forces, moments, concurrent and non-concurrent coplanar forces. (30-0)

91:210 Technical Physics I (4 s.h.) Prerequisite/Corequisite: 91:107, Technical Mathematics I; or 40:151, College Algebra & Trigonometry I. This course presents traditional fields of physics such as measurement, mechanics, properties of matter, simple harmonic motion, and waves. Emphasis is placed on industrial and technical applications of physics. (45-30)

91:211 Technical Physics II (4 s.h.) Prerequisite/Corequisite: 91:107, Technical Mathematics I; or 40:151, College Algebra & Trigonometry I, or an equivalent course in algebra and trigonometry. This course presents traditional fields of physics such as thermodynamics, electricity and magnetism, DC and AC circuits, and light. Emphasis is placed on industrial and technical applications of physics. (45-30)

91:212 Design Research Laboratory (2 s.h.) Prerequisite: 91:251, Strength of Materials; and 91:210, Technical Physics I; Corequisite: 91:240, Fluid Mechanics; and 90:231, Machine Element Design. Course includes instruction and laboratory techniques in Statistical Process Control, including Deming's 14 points, project selection, data gathering, variable and attribute charts, interpretations and capabilities; rapid prototyping using stereolithography equipment; and geometric dimensioning and tolerancing including functional part relationships of features, manufacturing, inspection, and economics using ANSI Y14.5M-1994. (15-30)

91:226 Fundamentals of Unigraphics (4 s.h.) Prerequisite: 90:231 Drafting II. Solid modeling fundamentals using Unigraphics CAD software. Layers, creating lines, arcs and circles, fillets and chamfers, trimming, extruding, sweeping along a guide, sketch a datum plane, blends, hollow solid, tapers, holes, slot, groove, pocket, boss, threads, and instance array. (30-112)

91:227 Fundamentals of ProEngineer (4 s.h.) Prerequisite: 90:122, Drafting I; 90:131, Drafting II; 91:108, Technical Mathematics II. Solid modeling fundamentals using ProEngineer CAD software. Sketcher mode part creation and sketcher constraints; holes, cuts, shafts, rounds, chamfers, slots, revolved features, patterns, sweeps, blends, and shell. Fundamental knowledge of model trees, parent-child relations, datum planes and feature relations. Assembly fundamentals including components, constraints and sub-assemblies. Drawing creation with part and assembly associativity, view types, notes, and dimensioning. (30-112)

91:240 Fluid Mechanics (3 s.h.) Prerequisite/Corequisite: 91:108, Technical Mathematics II. A basic principles course using mathematical analysis dealing with confined noncompressible fluids and applications of fluid power systems. Primary emphasis is on the topics of fluid statics, flow of fluid in pipes, and flow measurement. (45-0)

91:251 Strength of Materials (3 s.h.) Prerequisite/Corequisite: 91:109, Technical Math III; and 91:150, Statics. Course includes simple stresses and properties, moment of inertia, torsional properties, columns, beams including shear, moment and deflection diagrams and formulas, flexure formula, and combined stresses. (45-0)

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

95:131 Communications II (3 s.h.) Further study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

Welding - Evening Program

The program is designed for industry and individuals seeking personal skill development. Students are first exposed to theory and demonstrations, along with laboratory experiences. This is followed with an open lab to allow students additional laboratory experience in order to achieve the program's outlined competencies. Upon satisfactory completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded a certificate.

Those currently involved in the following areas will benefit from the program:

- * Maintenance
- * Farm or Ag related
- * Auto
- * Construction
- * General industrial
- * Hobbies or backyard

A student may take the program in either order.

First Term

- 98:110 Welding Symbols & Blueprint Reading ...2 s.h.
- 98:190 Oxyacetylene Welding & Cutting;
Gas Tungsten Arc Welding.3 s.h.

Second Term

- 98:135 Welding Symbols/Blueprint Reading II....2 s.h.
- 98:191 Shielded Metal Arc & Gas Metal Arc.....3 s.h.

98:191 Shielded Metal Arc and Gas Metal Arc (3 s.h.)

Flat and horizontal shielded arc, vertical, and overhead shielded arc welding. The operation of AC and DC transformer arc welders and motor-driven DC welders. The effects of amperage, polarity, and characteristics of various electrodes. Butt, fillet, corner, and lap welds are made in various positions. Application of techniques required for equipment repair. (15-90)

Course Descriptions

Welding - Evening Program

98:110 Welding Symbols and Blueprint Reading (2 s.h.) Prerequisite: None. This course provides instruction in the fundamentals of reading and interpreting blueprints. A student learns to interpret and apply welding symbols along with identifying proper assembly procedures. (30-0)

98:135 Welding Symbols and Blueprint Reading II (2 s.h.) Prerequisite: 98:110, Welding Symbols and Blueprint Reading. This course provides instruction in the reading and interpreting of blueprints. The course covers the applications of welding symbols, dimensions, and assembly procedures. (15-30)

98:190 Oxyacetylene Welding and Cutting; Gas Tungsten Arc Welding (3 s.h.) Fusion joining of mild steel and cutting processes. The basic principles of gas tungsten arc welding including AC and DC applications. Selection of proper torch tip sizes, filler rods, angles, and travel speeds for OAW processes. The set-up and adjustment of gas tungsten arc welding equipment, along with practical experience using both ferrous and nonferrous metals. (15-90)

Industrial Electives

If electives are required for your industrial program studies, counselors and industrial instructors will help you select courses from the following course listing which will help focus your specialty study:

INDUSTRIAL ELECTIVES:

90:128 Introduction to CAD
 90:129 CAD II
 90:299 Special Problems in Career Programs
 91:128 Basic Electricity
 91:129 Industrial Electricity I
 91:164 Electrical Wiring I
 91:171 Electrical Wiring II
 92:202 C/C++ Programming
 98:191 Shielded Metal Arc and Gas Metal Arc

Course Descriptions

Industrial Electives

90:128 Introduction to CAD (2 s.h.) Prerequisite/Corequisite: none. A class in Auto CAD Release 2000 commands. A thorough introduction of two-dimensional drafting commands and command options. The sessions are hands-on using a variety of application drawing exercises that are modified or created. (15-30)

90:129 CAD II (2 s.h.) Prerequisite/Corequisite: 90:128, Introduction to CAD, or equivalent experience. This course is designed to build on the skills acquired in introduction to CAD. This course will review multi view drawings, layers, linetypes, colors, basic and advanced dimensioning, blocks and attributes, sectional views, three-dimensional drawing techniques, plotting, and printing with AutoCAD 2000. (15-30)

90:299A Special Problems in Career Programs (1 s.h.) Students may submit a proposal for a special project to the instructor. With the instructor's approval and the consent of the Division Chair and Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeated for credit. (15-0)

90:299B Special Problems in Career Programs (2 s.h.) Students may submit a proposal for a special project to the instructor. With the instructor's approval and the consent of the Division Chair and Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeated for credit. (30-0)

90:299C Special Problems in Career Programs (3 s.h.) Students may submit a proposal for a special project to the instructor. With the instructor's approval and the consent of the Division Chair and Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeated for credit. (45-0)

91:128 Basic Electricity (2 s.h.) A basic fundamentals course required as a background in a variety of fields. Lab work covers practical applications. (15-30)

91:129 Industrial Electricity I (2 s.h.) Prerequisite/Corequisite: 91:128, Basic Electricity. This course provides an understanding of the theory, operation, installation, and maintenance of motor controllers. Labs stress development and troubleshooting of basic motor control circuits. (15-30)

91:164 Electrical Wiring I (2 s.h.) Prerequisite/Corequisite: 91:128, Basic Electricity. Provides an understanding of the types of control circuits, uses of electrical devices, wiring techniques, and application of the rules and regulations in the National Electrical Code concerning residential wiring. (15-30)

91:171 Electrical Wiring II (2 s.h.) Prerequisite/Corequisite: 91:128, Basic Electricity; 91:164, Electrical Wiring I. Provides an understanding of the types of control circuits, use of electrical devices, wiring techniques, and application of the rules and regulations in the National Electrical Code concerning commercial wiring. (15-30)

92:202 C/C++ Programming (3 s.h.) Prerequisite: 91:104 Intro to Technical Computing and CAD. Structured computer programming utilizing C/C++. Use of existing library functions. Development of structured programming practices and internal documentation. Branching, loops, pointers, strings, arrays and file I/O. Introduction to object-oriented programming. Data structure, language, and hardware interfacing concepts are introduced. Program debugging and implementation. (45-0)

98:191 Shielded Metal Arc and Gas Metal Arc (3 s.h.) Flat and horizontal shielded arc, vertical and overhead shielded arc welding. The operation of AC and DC transformer arc welders and motor-driven DC welders. The effects of amperage, polarity, and characteristics of various electrodes. Butt, fillet, corner, and lap welds are made in various positions. Application of techniques required for equipment repair. (15-90)

Are you considering transferring to a four-year college or university?

Students who earn associate degrees in the Industrial Technology programs at NIACC may wish to apply their studies toward a bachelor's degree in technology-related fields at a four-year college or university. For further information on such options as industrial technology (manufacturing), construction management, electromechanical systems, engineering technology, general industry and technology, manufacturing technology, and technology education at Iowa State University, the University of Northern Iowa, Upper Iowa University, and Wartburg College, please see pages 131-153 in the catalog or speak with a NIACC advisor.

High School Partnerships

ARTICULATION

POST SECONDARY ENROLLMENT OPTIONS

CAREER READINESS COUNCIL

TECH PREP

HIGH SCHOOL PARTNERSHIPS

NIACC is currently developing cooperative programs with high schools in our service area to identify Career Program prerequisites, to reward students for previous learning experiences, to provide a challenging educational experience for each student, and to ensure a smoother transition for students into postsecondary degree programs.

Articulation

Articulation is a process whereby students can receive tuition-free college credits toward graduation for successfully completing certain high school courses identified to have college-level material. NIACC faculty members meet with high school teachers to carefully compare their course offerings and identify areas of content overlap. The result is a savings of time and financial resources for the student interested in a time-shortened degree or increased competence and employment potential for the student interested in an advanced skills degree. Contact your counselor to obtain a list of high school courses that articulate into NIACC Career Programs.

Post Secondary Enrollment Options

The Post Secondary Enrollment Options Act provides high school juniors and seniors with the opportunity to take college courses prior to high school graduation. The act has a dual purpose: 1) to provide a constant challenge for students by promoting rigorous educational pursuits; and 2) to provide a wider variety of options for students. Students may earn high school and college credit for courses taken. Post secondary credits earned are transferable to other colleges and universities depending on degree requirements at that institution. Contact your counselor for further information on Post Secondary Enrollment Options.

Career Readiness Council

The Area Two Career Readiness Council--a group comprised of representatives from high schools, Workforce Development, business and industry, organized labor, Northern Trails Area Education Agency, the Transition Advisory board, and NIACC--has established career education goals for Area Two:

- * Develop shared programs.
- * Develop a comprehensive career development system.
- * Continue support for applied academic course work.
- * Foster business, industry, and professional connections for our students, teachers, and employers.
- * Meet increased needs associated with diversity.

As a member of the Career Readiness Council, NIACC collaborates with the representatives to implement these broad-based career education goals.

Tech Prep

Tech Prep is a partnership between secondary schools, post secondary institutions, business and industry, and other community groups that focuses on providing students with the skills necessary to perform in today's highly technical workforce. A major component of the program is an applied (hands-on) curriculum that recognizes the widely varying learning styles of students. It involves the creation of a carefully designed sequence of high school and college courses leading to an associate degree in a number of fields. Student career exploration and planning, along with a parental community awareness of workforce needs and employment opportunities, are vital components of a Tech Prep program.

For information about the Tech Prep programs available at your high school, contact your high school counselor or call the NIACC Tech Prep Coordinator at 641-422-4177 or 1-888-GO NIACC, ext. 4177.

College Transfer Programs

This guide has been prepared for NIACC students transferring to the colleges and universities listed.

Curriculum is recommended for each of the major courses that can be taken at NIACC. Students should, however, check the requirements of their major with a NIACC counselor/advisor.

Students are also encouraged to correspond with their transfer college to obtain a verification of their planned courses while at NIACC.

Articulation 2000 seeks to strengthen articulation and transfer by looking beyond the traditional and common practice. The colleges/universities participating in NIACC's Articulation 2000 Program are Buena Vista University, Central College, Drake University, Iowa State University, Simpson College, the University of Iowa, University of Northern Iowa, Upper Iowa University, and Wartburg College. Course equivalency sheets between NIACC and these institutions are available from a NIACC counselor/advisor. Joint admission is one of the outcomes of NIACC's Articulation 2000 Program.

Transfer Division Chairs:

Gary Christiansen, Business
(641) 422-4226

Larry Eichmeier, Agriculture
(641) 422-4225

Gary Forbess, Industrial
(641) 422-4202

Donna Orton, Health
(641) 422-4216

Dennis Vrba, Natural Science
(641) 422-4320

James Zirnheld, Social Science and Humanities
(641) 422-4282

Patrick Kennedy, Transfer Relations
(641) 422-4325

Agriculture and Agricultural Related

The range of career opportunities and majors in agriculture is so great that it is impossible to list a suggested curriculum for each. The catalog for Iowa State University states: Requirements for any four-year curriculum are at least as extensive as those shown below.

- Communication Skills I & II 8 s.h.
- Mathematics, Chemistry, Computer Science, Physics, and Statistics 13 s.h.
- Biological Principles, Zoology, Botany, Microbiology, Genetics 6 s.h.
- Economics, Government, Psychology, Sociology (Economics, Government required of most curriculums) 6 s.h.
- Art, History, Literature, Music, Philosophy . . . 6 s.h.

Since there is a wide variation in the required courses for the various curriculums in agriculture, it is the responsibility of each student, in consultation with his/her advisor or counselor, to determine the specific courses required for the particular curriculum or major in which the student is interested.

Iowa State University

NIACC and Iowa State University's Department of Agricultural Education and Studies have teamed up to design a unique program in agriculture. The first two years of the program can be taken at NIACC and the final two years are completed at Iowa State University. Students completing the NIACC program are awarded an associate in applied science degree in Agricultural Operations. Those continuing on to complete the two-year program at ISU will receive a bachelor of science degree in Agricultural Studies. Note: Iowa State University College of Agriculture students must certify English proficient by obtaining a "C" or better in written and verbal communication courses. Students completing the prescribed courses will fulfill the College of Agriculture's intensive requirements in ethics, problem solving, communication, and environment.

The following courses have been articulated with Iowa State University's College of Agriculture.

- Animal Science I 3 s.h.
- Animal Science II 3 s.h.
- Computer Applications for Agriculture 3 s.h.
- Crop Science I 3 s.h.
- Crop Science II 3 s.h.
- Intro to Ag Business 3 s.h.

Art

- Communication Skills I & II 8 s.h.
- Art History I 4 s.h.
- Art History II 4 s.h.
- Drawing 3 s.h.
- Ceramics 3 s.h.
- Two-Dimensional Design 3 s.h.
- Graphic Design 3 s.h.
- Painting I 3 s.h.
- Painting II 3 s.h.
- Creative Photography 3 s.h.
- Natural Science 8 s.h.
- Social Science 8 s.h.

The art major should take additional hours or general education in the pursuit of the associate in arts degree.

Drake University

Drake offers majors in Art History, Drawing, Graphic Design, Painting, Printmaking, and Sculpture, and also offers a minor in art. Students wanting to teach art in elementary or secondary school may complete an art endorsement through the School of Education at Drake. Students interested in Drake's art programs should contact the Department of Art and Design early to plan for transfer and scholarship portfolio review.

- Communication Skills I & II 4 s.h.
- Communication Skills - Speaking 2 s.h.
- History 3 s.h.
- Life and Physical Sciences (must include lab) 8 s.h.
- Mathematics (College Algebra or higher) . . 3-4 s.h.
- Values and Ethics 3 s.h.
- International/Multicultural Awareness 3 s.h.
- History of Art I & II 8 s.h.
- Drawing 3 s.h.*
- Two-Dimensional Design 3 s.h.*
- Painting I, II 6 s.h.*
- Intro Computer-Aided Graphic Design 3 s.h.*
- Computer-Aided Images 3 s.h.*

*Credit for specific requirements for art majors may require portfolio validation in studio courses and proficiency validation in Art History courses. All art courses with a grade of "C" or better can count as art electives.

Many of the courses listed above also fulfill Drake curriculum requirements. For specific Drake Curriculum (general education) information, students should access the Drake Curriculum website at <http://www.educ.drake.edu/dc> or contact the Office of Admission, 1-800-44-DRAKE ext. 3181. It is recommended that students planning for transfer to Drake save NIACC course syllabi for in-depth review for Drake Curriculum outcomes fulfillment upon transfer.

Simpson College

Courses which may be taken at North Iowa Area Community College to complete major requirements at Simpson College:

Art History I	4 s.h.
Art History II	4 s.h.
Art in Elementary School	3 s.h.
Drawing	3 s.h.
Ceramics	3 s.h.
Creative Photography	3 s.h.
Intermediate Photography	3 s.h.
Painting I	3 s.h.
Painting II	3 s.h.
Two-Dimensional Design	3 s.h.

Upper Iowa University

Students should consider taking the following courses to meet requirements. Completion of the A.A. degree at NIACC will meet the general education requirements.

Art History I & II	8 s.h.
Drawing	3 s.h.
Ceramics or Painting I	3 s.h.
Two-Dimensional Design	3 s.h.

Art Education**Upper Iowa University**

RESIDENTIAL CAMPUS

Students should consider taking the following courses to meet requirements in the following majors. Completion of the A.A. degree at NIACC will meet the general education requirements.

History of Art I and II	8 s.h.
Drawing	3 s.h.
Ceramics	3 s.h.
Painting I and II	6 s.h.
Art in the Elementary School	3 s.h.

Athletic Trainer**Iowa State University**

The athletic training program prepares students for the NATA certification examination. Admission to this program is determined by GPA in foundation courses and clinical hours under a certified athletic trainer. The program is administered through the Department of Health and Human Performance. See course recommendations under Physical Education-Athletic Training.

Also available at the University of Iowa, the University of Northern Iowa, Minnesota State University - Mankato, and Upper Iowa University. (Need 1500 hours of supervised training.)

Biology**Upper Iowa University**

RESIDENTIAL CAMPUS

Students should consider taking the following courses to meet requirements in the following majors. Completion of the A.A. degree at NIACC will meet the general education requirements.

Biology I and II	6 s.h.
Microbiology	4 s.h.
General Chemistry I and II	6 s.h.
General Physics I and II or Organic Chemistry I and II	8-10 s.h.

Biology and Environmental Science**Simpson College**

Courses which may be taken at North Iowa Area Community College to complete major requirements at Simpson College:

Biology I and II	8 s.h.
Microbiology	4 s.h.
Human Biology	*4 s.h.
Genetics	4 s.h.
Nutrition OR Health and Nutrition	3 s.h.
Anatomy and Physiology I and II	8 s.h.
Chemistry Principles I and II	10 s.h.
General Physics I and II OR College Physics I and II	8-10 s.h.

* Human Biology does not fulfill a requirement for Biology or Environmental Science

Business

The first two years of a four-year program in business administration, accounting, business education, or any other curriculum in business administration will usually consist primarily of liberal arts. After completion of the first two years of a four-year program in business, the student applies for admission at the selected transfer institution. It is at this time that he/she is asked to indicate a chosen business major and is advised to meet requirements for the degree. The requirements of the various four-year institutions vary somewhat; hence, the student should check carefully the admission and curriculum requirements of the institution to which he/she plans to transfer.

The following courses are common to all business curricula at the colleges listed below:

Communication Skills I & II	8 s.h.
Macro and Microeconomics	6 s.h.
Introduction to Computers	3 s.h.
Intro to Statistics	3 s.h.
Accounting Principles I & II	6 s.h.
Social Sciences	3 s.h.
Humanities	8 s.h.
College Mathematics	3-4 s.h.

In addition, these colleges have the following specific requirements:

Buena Vista University (Mason City Campus)

ACCOUNTING

Business Law I	3 s.h.
Interm Algebra	4 s.h.
Quantitative Methods	3 s.h.
Marketing	3 s.h.
Cost Accounting	3 s.h.
Business Statistics	3 s.h.

MANAGEMENT/ ENTREPRENEURSHIP

Principles of Management	3 s.h.
Business Law I	3 s.h.
Interm Algebra	4 s.h.
Quantitative Methods	3 s.h.
Marketing	3 s.h.
Business Statistics	3 s.h.
Human Resource Management	3 s.h.

FINANCE AND BANKING

Interm Algebra	4 s.h.
Quantitative Methods	3 s.h.
Business Law I	3 s.h.
Business Statistics	3 s.h.

MANAGEMENT INFORMATION SYSTEMS

Interm Algebra	4 s.h.
Quantitative Methods	3 s.h.
Business Law I	3 s.h.
Marketing	3 s.h.
Business Statistics	3 s.h.
Intro to MIS	3 s.h.

Drake University

BUSINESS

Accounting, Actuarial Science, Finance, General Business, Information Systems, International Business, Management, Marketing; all majors in the College of Business and Public Administration are offered as joint majors with Accounting.

Accounting and Actuarial Science major applicants must have a cumulative GPA of at least 2.50 for admission.

Courses that are recommended as part of the common business curricula:

Microeconomics	3 s.h.
Macroeconomics	3 s.h.
Accounting Principles I	3 s.h.
Accounting Principles II	3 s.h.
Computer Applications or Intro to CIS	3 s.h.
Business Law I	3 s.h.
Calculus for Business*	3 s.h.
Business Statistics	3 s.h.

*Analytic Geometry and Calculus I may be taken instead of Calculus for Business. Students interested in Actuarial Science as a major need to take Analytic Geometry and Calculus I, II, and III.

For specific general education requirements, business majors should access the Drake Curriculum website at www.edu.drake.edu/dc or contact the Office of Admissions 1-800-44-DRAKE, ext. 3181. It is recommended that NIACC students save their course syllabi for review for Drake Curriculum outcomes fulfillment upon transfer.

Iowa State University

ACCOUNTING, FINANCE, MANAGEMENT, MANAGEMENT INFORMATION SYSTEMS, MARKETING, PRODUCTION/ OPERATIONS MANAGEMENT, TRANSPORTATION AND LOGISTICS

Students at Iowa State University begin in the College of Business as a Pre-Business student. Students will declare a major and enter the professional program once they have earned a 2.5 GPA (cumulative or foundation) and have completed 30 credits including the foundation courses. The foundation courses include:

Communication Skills I and II	6-8 s.h.
Quantitative Methods	3 s.h.
Accounting Principles I	3 s.h.
Introduction to Computers	3 s.h.
Microeconomics	3 s.h.
Business Statistics	3 s.h.

IST Major Courses	40-44 s.h.
Communication Skills I and II	8 s.h.
Accounting Principles I and II	6 s.h.
Microeconomics	3 s.h.
Macroeconomics	3 s.h.
Quantitative Methods	3 s.h.

Minnesota State University - Mankato

ACCOUNTING

Natural Sciences	4 s.h.
College Algebra and Trigonometry I	4 s.h.
Distributed Requirement (NIACC)	8 s.h.
Business Statistics	3 s.h.

MARKETING, MANAGEMENT, INTERNATIONAL BUSINESS, FINANCE, REAL ESTATE, AND INSURANCE

Natural Sciences	4 s.h.
College Algebra and Trigonometry I	4 s.h.
Electives	12 s.h.
Foreign Language (International Business)	8 s.h.
(Intermediate level)	
Natural Science 140	3 s.h.

Simpson College

Courses which may be taken at North Iowa Area Community College to complete major requirements at Simpson College.

MANAGEMENT ACCOUNTING & ECONOMICS

Intro to Business OR	
Principles of Management	3 s.h.
Business Law I	3 s.h.
Business Law II OR Law and Banking	3 s.h.
General Insurance	3 s.h.
Business Statistics	3 s.h.

Marketing	3 s.h.
Cost Accounting	3 s.h.
Intro to Accounting	3 s.h.
Accounting Principles I and II	6 s.h.
Managing the Entrepreneurial Venture	3 s.h.
Managing Human Resources	3 s.h.
On-The-Job Training	3 s.h.

University of Iowa (Currently 2.6 GPA, goes to 2.75 effective for entry Summer 2002 and after.)

Admission is competitive, based on cumulative GPA and combined grades in six prerequisite courses. Students hoping to enter the College of Business may not have a grade lower than "C" on any individual prerequisite course.

Apply to the College of Liberal Arts as a pre-business major after one year. Iowa will move student to business when all admission prerequisite and GPA criteria are met. This early entry is best for financial aid, housing, and course availability.

ACCOUNTING, ECONOMICS, FINANCE, MANAGEMENT AND ORGANIZATIONS, MANAGEMENT SCIENCES, AND MARKETING

Calculus for Business	3 s.h.
Accounting Principles I & II	6 s.h.
Business Law I	3 s.h.
Global and Cultural Studies	3 s.h.
Business Statistics	3 s.h.

Effective Summer 2002 and after, the University of Iowa College of Business will require second level proficiency in a single foreign language to graduate.

University of Northern Iowa

(Min. 2.50 GPA)

ACCOUNTING, FINANCE, MANAGEMENT, MARKETING, MIS

Quantitative Methods	3 s.h.
Business Statistics	3 s.h.
Introduction to Computers & Info. Systems	3 s.h.
Macroeconomics	3 s.h.

BUSINESS TEACHING MAJOR

Introduction to Teaching	3 s.h.
Human Growth and Development	3 s.h.
Advanced Keyboarding (recommended, not required)	3 s.h.
Quantitative Methods	3 s.h.
Business Statistics	3 s.h.
Introduction to Computers & Info. Systems	3 s.h.
Macroeconomics	3 s.h.

MANAGEMENT INFORMATION SYSTEMS MAJOR

Quantitative Methods	3 s.h.
Business Statistics	3 s.h.
Macroeconomics	3 s.h.
Introduction to Computers & Info. Systems	3 s.h.
Macroeconomics	3 s.h.

Upper Iowa University

RESIDENTIAL CAMPUS

Students should consider taking the following courses to meet requirements in the following majors. Completion of the A.A. degree at NIACC will meet the general education requirements in addition to courses common to all business curricula.

MARKETING MAJOR

Business Law I	3 s.h.
Introduction to MIS	3 s.h.
Business Statistics	3 s.h.
Marketing	3 s.h.
Principles of Management	3 s.h.
Principles of Advertising	3 s.h.
Retailing	3 s.h.

ACCOUNTING MAJOR

Business Law I	3 s.h.
Introduction to MIS	3 s.h.
Business Statistics	3 s.h.
Marketing	3 s.h.
Principles of Management	3 s.h.

MANAGEMENT MAJOR

Business Law I	3 s.h.
Introduction to MIS	3 s.h.
Business Statistics	3 s.h.
Marketing	3 s.h.
Principles of Management	3 s.h.
Principles of Supervision	3 s.h.
Management of Human Resources	3 s.h.

MIS MAJOR

Business Law I	3 s.h.
Introduction to MIS	3 s.h.
Business Statistics	3 s.h.
Marketing	3 s.h.
Principles of Management	3 s.h.
Data Base Management	3 s.h.

Wartburg College

ACCOUNTING, FINANCE

One laboratory science	4 s.h.
Western Civilization	4 s.h.
Quantitative Methods	3 s.h.
Introduction to Computers	3 s.h.
Business Statistics	3 s.h.

MANAGEMENT, MARKETING

One laboratory science	4 s.h.
Western Civilization	4 s.h.
Principles of Management	3 s.h.
Marketing	3 s.h.
Business Law I	3 s.h.
Quantitative Methods	3 s.h.
Introduction to Computers	3 s.h.
Business Statistics	3 s.h.

INTERNATIONAL BUSINESS

One laboratory science	4 s.h.
Western Civilization	4 s.h.
French, German, or Spanish (through the intermediate level)	8-16 s.h.
Quantitative Methods	3 s.h.
Introduction to Computers	3 s.h.
Business Statistics	3 s.h.

Chiropractic**Palmer** (Min. GPA 2.50 and 90 s.h.)

Communication Skills I & II	8 s.h.
General Chemistry I & II	10 s.h.
OR	
Chemistry Prin. I & II	10 s.h.
Organic Chemistry I & II	10 s.h.
General Physics I & II	8 s.h.
Anatomy & Physiology I and II	8 s.h.
Humanities/Social Sciences	15 s.h.
General Psychology	3 s.h.

Coaching

Since February 1, 1985, NIACC has been designated as an approved provider of the Coaching Authorization Training Program for State of Iowa licensure. The program consists of four courses: Theory, Ethics, and Professional Responsibilities of Coaching; Introduction to Anatomy and Physiology for Coaching; Human Development in Sports; and Care and Prevention of Athletic Injuries. This program is approved for teachers desiring to obtain the coaching endorsement, as well as others seeking the coaching authorization. Completion of the program enables the student to be licensed to coach any sport at the public school or community college level.

Iowa State University

A State of Iowa coaching endorsement can be earned through the Physical Education Licensure program. A coaching minor is also available. The endorsement is administered through the Department of Health and Human Performance. See course recommendations for the coaching endorsement under Physical Education-Licensure.

Computer Science**Drake University**

COMPUTER SCIENCE

Students may take the following courses in the major area at NIACC:

Analytic Geometry and Calculus I & II	8 s.h.
C/C++ Programming	3 s.h.

INFORMATION SYSTEMS

Students may take the following courses in the major area at NIACC:

Computer Applications or Intro to Computers	3 s.h.
Intro to Management Information Systems. . .	3 s.h.
C/C++ Programming*	3 s.h.

*Only one computer language course is required for Information Systems majors. One or the other will meet the requirement.

For specific Drake Curriculum (general education) requirements, students should access the Drake Curriculum website at <http://www.edu.drake.edu/dc> or contact the Office of Admissions 1-800-44-DRAKE, ext. 3181. It is recommended that NIACC students save NIACC course syllabi for in-depth review for Drake Curriculum outcomes fulfillment upon transfer.

Iowa State University

COMPUTER SCIENCE

Courses which may be taken at North Iowa Area Community College to meet specific major requirements at Iowa State University:

Communication Skills I & II	8 s.h.
Analytic Geometry and Calculus I & II	8 s.h.
College Physics I & II	10 s.h.

Complete additional courses to satisfy A.A. degree requirements at North Iowa Area Community College.

Minnesota State University - Mankato

COMPUTER SCIENCE

Students interested in a straight Computer Science (CS) major should complete the requirements for the bachelor of science degree in addition to the following courses at North Iowa Area Community College:

Communication Skills I & II	8 s.h.
Analytic Geometry and Calculus I & II	8 s.h.
Chemistry Principles I & II OR	
College Physics I & II OR	
Biology I & II	8-10 s.h.

CIS/MIS

Courses which may be taken at NIACC to meet specific major requirements:

Communication Skills I & II	8 s.h.
Statistics	3 s.h.

If the student plans to complete a Business Administration and Computer Science Interdisciplinary (ICIS) major, he/she should complete the Business Administration Curriculum and fill in the electives with the above Computer Science courses. Computer Science (CS) majors should write to the Admissions Office and ask for a computer science brochure.

Simpson College

Courses which may be taken at North Iowa Area Community College to complete major requirements at Simpson College:

- Analytical Geometry and Calc I and II 8 s.h.
- Intro to Statistics 3 s.h.

University of Northern Iowa**COMPUTER SCIENCE**

Courses which may be taken at North Iowa Area Community College to meet specific major requirements at University of Northern Iowa:

B.A. Degree:

- Analytic Geometry and Calculus I and Intro to Statistics 7 s.h.

B.S. Degree:

- Analytic Geometry and Calculus I & II 8 s.h.

Complete additional courses to satisfy A.A. degree requirements at North Iowa Area Community College.

COMPUTER INFORMATION SYSTEMS

Courses which may be taken at North Iowa Area Community College to meet specific major requirements at the University of Northern Iowa:

- Accounting Principles I and II 8 s.h.
- Introduction to Statistics 3 s.h.
- Macroeconomics 3 s.h.

Complete additional courses to satisfy A.A. degree requirements at North Iowa Area Community College.

Conservation

This major has a wide variety of preparation possibilities and should be discussed with your counselor. See Agriculture.

Conservation Management**Upper Iowa University**

Conservation Management is designed for students seeking a career in conservation.

Courses which may be taken at North Iowa Area Community College to meet specific major requirements at Upper Iowa University:

- Biology I and II 8 s.h.
- Microbiology 4 s.h.
- Principles of Management 3 s.h.
- Intro to American Government OR
American State and Local Government . . . 3 s.h.

Criminal Justice**Buena Vista University**

Courses which may be taken at North Iowa Area Community College to meet specific major requirements at Buena Vista University:

- General Psychology 3 s.h.
- Sociology or Social Problems 3 s.h.
- American Government 3 s.h.
- Criminal Law I 3 s.h.
- Criminal Law II 3 s.h.
- Administration of Justice 3 s.h.
- Criminal Investigation 3 s.h.

Complete additional courses to satisfy A.A. degree requirements at North Iowa Area Community College. A second major or minor is required for this degree.

Dentistry**University of Iowa**

Each applicant for the College of Dentistry at the University of Iowa must present three years of credit comprising not less than 94 semester hours of work. Preference for admission is given to students who have completed a standard baccalaureate degree or who are pursuing a combined program in which they will earn the baccalaureate degree while completing the freshman year in dentistry. The academic work would include the courses listed below which are attainable at North Iowa Area Community College:

- Communication Skills I & II 8 s.h.
- Biology I & II 8 s.h.
- General Physics I and II 8 s.h.
- Chemistry Principles I and II 10 s.h.
- Organic Chemistry I and II 10 s.h.

General Education Electives: sufficient course work in social sciences, philosophy, history, foreign languages, and mathematics to provide a well-rounded educational background.

All students are required to take the Dental Admission Test (DAT) on or before August 1 of the year preceding the year they expect to matriculate in a dental school. Test application deadline typically is 30 to 45 days prior to the exam.

Applicants must submit a completed application form to the American Association of Dental Schools Application Service (AADSAS). The AADSAS forms are available from the University Office of Admissions or the College of Dentistry Office for Student Affairs. A computerized DAT is available throughout the year at designated Sylvan Testing Centers.

Applications are accepted beginning June 1 of the year prior to the year for which application is made. Completed applications should be on file at AADSAS by November 1. Applicants should apply as early as possible and should not delay until after the Dental Admission Test (DAT) is taken. Notifications of acceptance are sent beginning December 1.

Education

Secondary Teacher Education--for specific information about teaching physical education, see Physical Education-Licensure.

There is no standardized curriculum in education. Each college or university has its own requirements which differ in varying degrees from other schools. Below are listed representative colleges to which most North Iowa Area Community College students transfer, together with a list of courses which may be obtained at North Iowa Area Community College to meet necessary requirements. There are some states that do not accept transfer education courses unless they are taken in that particular state.

Buena Vista University

ELEMENTARY EDUCATION

Children's Literature	3 s.h.
U.S. History or Non U.S. History	3 s.h.
American Government	3 s.h.
Geography course	3 s.h.
Exploring Music or Essentials of Art or Intro to Theater OR Art History.	3 s.h.
Physical Science OR Intro to Chemistry	4 s.h.
Biology	3 s.h.
Communication Skills I & II.	8 s.h.
General Psychology	3 s.h.
Mathematics for Elementary Teachers	3 s.h.
A literature course	3 s.h.
Introduction to Teaching.	3 s.h.
Educational Media Techniques	3 s.h.
Introduction to Philosophy or Ethics.	3 s.h.
Educational Psychology and Human Growth OR Child Psychology.	3 s.h.
Intermediate Algebra	4 s.h.

1. Students seeking admission into the Teacher Education program at Buena Vista University need a minimum GPA of 2.50. Students are also required to take the PRAXIS I (pre-professional skills test) and receive minimum scores of 171 (Math), 173 (Reading), and 172 (Writing). The PRAXIS may be taken before transferring to Buena Vista University. Also, all Buena Vista University students are required to take Proficiency Exams in the areas of Math and Written Communications.
2. All Incompletes must be completed before eligible to student teach.
3. Communication Skills I & II (8 s.h.) waives public speaking requirement.

Endorsements available in Reading, Pre-K, Middle School, as well as a minor in Multicategorical-Resource Special Education.

SECONDARY EDUCATION

U.S. History OR American Government.	3 s.h.
Exploring Music OR Essentials of Art OR Intro to Theater OR Art History.	3 s.h.
Physical Science OR Intro to Chemistry	4 s.h.

Biology	3 s.h.
Communications I and II.	8 s.h.
General Psychology	3 s.h.
Educational Psychology and Human Growth OR Child Psychology	3 s.h.
Public Speaking	3 s.h.
Creative Writing	3 s.h.
Introduction to Teaching.	3 s.h.
Educational Media Techniques	3 s.h.
Introduction to Philosophy OR A.A. degree	3 s.h.
Intermediate Algebra	4 s.h.

1. Secondary Education requires major in content area.
2. Students seeking admission into the Teacher Education program at Buena Vista University need a minimum GPA of 2.50. Students are also required to take the PRAXIS I (pre-professional skills test) and receive minimum scores of 171 (Math), 173 (Reading), and 172 (Writing). The PRAXIS may be taken before transferring to Buena Vista University. Also, all Buena Vista University students are required to take Proficiency Exams in the areas of Math and Written Communications.
3. All Incompletes must be completed prior to beginning student teaching.
4. Communications I and II (8 s.h.) waives public speaking course requirement.

Drake University

EDUCATION

Students planning to transfer into the School of Education at Drake University need a minimum cumulative GPA of 2.50 at 60 semester hours of credit. For admission into teacher education at Drake, students are also required to take the PPST (pre-professional skills test) and receive minimum scores of: Math - 169, Reading - 171, Writing - 171. The PPST may be taken prior to transfer or after arrival at Drake.

Both Elementary and Secondary Education majors complete the following courses:

Communication Skills I and II.	8 s.h.
Mathematics for Elementary Teachers (elementary only)	3 s.h.
American History	3 s.h.
American Government	3 s.h.
Public Speaking	2 s.h.
Biology I (may take Biological Principles + Lab).	4 s.h.
Chemistry Principles I.	5 s.h.
Intro to Physical Science + Lab	4 s.h.
Intro to Teaching	3 s.h.
Educational Measurement & Evaluation	2 s.h.
Ed Media & Classroom Computing Techniques	3 s.h.
Mainstreaming the Exceptional Learner.	2 s.h.

It is advised that students interested in an education major decide on a teaching content area or area of endorsement and begin taking required courses at

NIACC. Consult the Drake University/NIACC Articulation agreement or contact the Director of Student Services in the School of Education (1-800-44-DRAKE ext. 3747) for course recommendations.

Many of the courses listed above also fulfill Drake Curriculum requirements. For specific Drake Curriculum website at <http://www.educ.drake.edu/dc> or contact the Office of Admission, 1-800-44-DRAKE ext. 3181. It is recommended that students planning for transfer to Drake save NIACC course syllabi for in-depth review for Drake Curriculum outcomes fulfillment upon transfer.

Iowa State University

High School Teacher (Secondary Teacher Education). Students entering ISU for secondary education licensure are admitted into the college that offers their teaching subject (e.g., math, English, chemistry, etc. to Liberal Arts and Sciences, Agricultural Education, to the College of Agriculture). The College of Liberal Arts and Sciences will honor the A.A. degree as fulfilling the general education requirements of that college. Students should refer to that curriculum in this guide as well as the section in the ISU catalog titled "Teacher Education" and confer with the counselors at North Iowa Area Community College in preparing a schedule.

ELEMENTARY EDUCATION

The requirements for elementary education at Iowa State University are quite structured. The following list of courses will meet requirements for Iowa State University:

- Communication Skills I and II 8 s.h.
- Human Growth and Development 3 s.h.
- American Government 3 s.h.
- Additional Social Science 3 s.h.
- Anthropology, Economics, Geography, Psychology, Sociology, Humanities 6 s.h.
- Art, Foreign Language, History, Literature, Music, Philosophy, Theater, Physical Education 3 s.h. (May include First Aid and Physical Safety)
- Biological Science 3 s.h.
- Biological Principles, Anatomy & Physiology Physical Science 4 s.h.
- Physical Science, Principles of Physics, General Chemistry, Astronomy, General Physics
- Mathematics for Decision Making 3 s.h.
- Mathematics for Elementary Teachers. 3 s.h.
- Additional Mathematics 4 s.h.
- College Algebra/Trigonometry, Pre-Calculus, Analytical Geometry/Calculus I
- Introduction to Teaching 3 s.h.
- Children's Literature 3 s.h.
- Educational Psychology 3 s.h.
- Art in Elementary School 3 s.h.

Additional courses may fit into various areas of specialization. Contact an ISU advisor for details at 515-294-7021.

All students seeking recommendation for a teaching license from ISU must be admitted to the Teacher Education Program. Eligibility for the program is obtained after completing at least 9 credits at ISU with a 2.50 GPA, an ACT composite of 19 or greater, at least a "C" grade in Communications Skills I and II, and good mental/physical health. Students who do not meet the ACT requirements may retake the test or take the PPST and receive minimum scores of: 172 - Reading; 172- Writing; and 170 - Mathematics.

Minnesota State University - Mankato

SECONDARY EDUCATION (High School Teaching) In general, students planning to teach in the secondary schools should follow a general liberal arts curriculum. Students should consult the MSU catalog for specific freshman-sophomore level courses required in their major field.

ELEMENTARY EDUCATION

The following courses at North Iowa Area Community College will satisfy requirements for elementary education at Minnesota State University - Mankato:

- Communication Skills I and II OR
- Communication Skills I and
- Public Speaking 6-8 s.h.
- Humanities (chosen from two of the following areas: Literature, Music, Theater) . . 9 s.h.
- Drugs and Alcohol 3 s.h.
- Children's Literature 3 s.h.
- Social Studies (any social studies listed in the catalog from at least three disciplines) . . . 9 s.h.
- Biological Principles 4 s.h.
- Mathematics for Elementary Teachers 3 s.h.
- General Psychology 3 s.h.
- Principles of Physics 4 s.h.
- Introduction to Philosophy 3 s.h.
- Regional Geography of the Developed World. 3 s.h.
- American History 3 s.h.
- Introduction to Acting 3 s.h.
- Art in the Elementary School 3 s.h.

Additional hours may be selected in major areas of concentration.

A 2.5 overall GPA is required for admission to professional education.

The Preprofessional Skills Test (PPST) must be completed and on file at MSU before a student is allowed to take a professional education course. If the test is not completed and on file, a student will not be able to complete the elementary education degree in two years.

Simpson College

Courses which may be taken at North Iowa Area Community College to complete major requirements at Simpson College:

EDUCATION	
Intro to Teaching	3 s.h.
Children's Literature	3 s.h.
Human Growth and Development	3 s.h.

University of Iowa

EDUCATION
Students planning to transfer into the College of Education at The University of Iowa need a minimum of a 2.70 cumulative GPA and at least 30 semester hours of credit. Admission is competitive and is based on an achievement profile which includes: GPA; PRAXIS I; experience; references; and a personal statement. In addition, students should have completed an approved 10-hour volunteer practicum. Testing and registration details for the PRAXIS I are available at www.teachingandlearning.org.

Education majors fulfill the same General Education Program Requirements (GERs) as students in the College of Liberal Arts. Therefore, NIACC students may use the A.A. degree to automatically fulfill all GERs, with the exception of foreign language. Foreign language may be taken in high school or at NIACC to meet these requirements. Licensure requirements include the following courses: college-level math; one biological science; one physical science; one behavioral science; and one general social science.

ELEMENTARY AND SECONDARY EDUCATION
In addition to the above requirements, students interested in teaching at the elementary level may wish to include the following:

Intro to Teaching	3 s.h.
Educational Psychology	3 s.h.

ADDITIONAL SECONDARY EDUCATION REQUIREMENTS
In addition to the general education requirements explained above, students interested in teaching at the secondary level should consult their NIACC counselor in selecting courses approved for use toward their teaching major. Intro to Teaching and Educational Psychology may also fulfill major requirements.

APPLICATION DEADLINES:
Fall Semester - June 15
Spring Semester - October 15
Summer Session - March 15

University of Northern Iowa

All education majors should take the Pre-Professional Skills Test (PPST) during their sophomore year and have the scores reported to UNI. Education majors should maintain a minimum 2.5 grade point average.

ELEMENTARY EDUCATION
Elementary Education * K-6 should consider:

Art in the Elementary School	3 s.h.
Communication Skills I and II	8 s.h.
Children's Literature	3 s.h.
Mathematics for Elementary Teachers	3 s.h.

Biology and Physical Science	8 s.h.
<i>One course in Life Science and one in Physical Science (at least one must have a lab, if AA is not earned)</i>	
Child Psychology (not required)	3 s.h.
Human Growth and Development	3 s.h.
Introduction to Teaching	3 s.h.
Ed Media/Classroom Computer Techniques	3 s.h.
Educational Psychology	3 s.h.
Ed Measurement and Evaluation	2 s.h.
Mainstreaming the Exceptional Student	2 s.h.

EARLY CHILDHOOD EDUCATION
Early Childhood Education majors (birth to grade 3) should consider:

Mathematics for Elementary Teachers	3 s.h.
Educational Media Techniques	3 s.h.
Children's Literature	3 s.h.
Communication Skills I and II	8 s.h.
Introduction to Teaching	3 s.h.
Human Growth and Development	3 s.h.
Education Psychology	3 s.h.
Ed Measurement & Evaluation	3 s.h.
Mainstreaming the Exceptional Student	3 s.h.
Nutrition	3 s.h.
Biological Principles and Physical Science	8 s.h.

INTEGRATED TECHNOLOGY EDUCATION
Integrated Technology Education majors should consider:

Communication Skills I & II	8 s.h.
General Physics I	4 s.h.
Statistics	3 s.h.
Intro to Teaching	3 s.h.
Human Growth & Development	3 s.h.
Educational Psychology	3 s.h.
Mainstreaming the Exceptional Student	2 s.h.
Educational Measurement & Evaluation	2 s.h.

SPECIAL EDUCATION
Special education majors (ages 5-21: moderate, severe, profound mental disabilities) should consider:

Intro to Teaching	3 s.h.
Human Growth and Development	3 s.h.
Educational Psychology	3 s.h.
Educational Measurement & Evaluation	2 s.h.
Ed Media/Classroom Computer Techniques	3 s.h.
Biology and Physical Science	8 s.h.

SECONDARY EDUCATION
Education majors with an interest in teaching at the secondary level should consider:

Educational Media Techniques	3 s.h.
Intro to Teaching	3 s.h.
Human Growth and Development	3 s.h.
Educational Psychology	3 s.h.
Educational Measurement & Evaluation	2 s.h.
Biology and Physical Science	8 s.h.
Mainstreaming the Exceptional Student	2 s.h.

Available course work in major and/or minor.
Students who plan to receive an Iowa Teacher's license must complete a life and physical science course.

Wartburg College

Acceptance into the Teacher Education and Student Teaching programs. Transfer students must complete one term at Wartburg to establish their GPA before applying for acceptance into the above programs.

A 2.5 overall GPA is required in course work taken at Wartburg College.

ELEMENTARY EDUCATION

Introduction to Teaching	3 s.h.
Educational Media Techniques	3 s.h.
Communication Skills I & II	8 s.h.
Children's Literature	3 s.h.
Biological Principles and	3 s.h.
Biological Principles Laboratory	1 s.h.
General Psychology	3 s.h.
Human Growth and Development	3 s.h.
Public Speaking	2 s.h.

SECONDARY EDUCATION

Introduction to Teaching	3 s.h.
Educational Media Techniques	3 s.h.
Communication Skills I & II	8 s.h.
General Psychology	3 s.h.
Human Growth and Development	3 s.h.

Secondary education majors must also meet the specific departmental requirements in their teaching major at Wartburg College.

Other Colleges and Universities

The student who plans to transfer to a college or university other than those listed above should confer with a counselor at North Iowa Area Community College in order that a satisfactory program may be arranged.

Engineering**Iowa State University**

The basic programs for all professional curricula of the College of Engineering are similar, and thus a student may transfer from one department to another within the college without undue loss of time. There are some differences; hence, the student who desires to complete work in minimum time will find it desirable to select a major department as soon as possible. The basic program includes both the following list of courses shared in common and requirements for individual curriculums. Students who are not adequately prepared may have to take additional math courses.

Courses which may be taken at North Iowa Area Community College to meet the requirements of the basic program generally common to all professional engineering curricula include the following:

Communication Skills I and II	8 s.h.
Analytic Geometry and Calculus	12 s.h.
Differential Equations	3 s.h.
Chemistry Principles OR	5 s.h.
General Chemistry I and II	10 s.h.
College Physics	10 s.h.
Orientation to Engineering	0 s.h.

Engineering Graphics and Design	3 s.h.
Engineering Problems with FORTRAN	3 s.h.
Statics of Engineering	3 s.h.
Socio-Humanistic electives	16-18 s.h.

There are a few exceptions to the above requirements and a few additional required courses for some areas of engineering. See your counselor or engineering instructor or ISU catalog for details.

Minnesota State University - Mankato

Engineering curricula offered at Minnesota State University - Mankato are Electrical Engineering and Mechanical Engineering, Civil Engineering, and Computer Engineering.

Courses which may be taken at North Iowa Area Community College to meet the requirements of the basic program common to all professional engineering curricula include the following:

Communication Skills I	3 s.h.
Analytic Geometry and Calculus	12 s.h.
Engineering Graphics	3 s.h.
Statics of Engineering	3 s.h.
Chemistry Principles	5 s.h.
College Physics	10 s.h.

Recommended Humanities and Social Science Electives (consult catalog)

Also required for Electrical Engineering and Mechanical Engineering:

Differential Equations	3 s.h.
Macro or Microeconomics	3 s.h.

University of Iowa

The following Engineering undergraduate degrees are offered at the University of Iowa:

Biomedical Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Industrial Engineering
Mechanical Engineering

Courses which may be taken at North Iowa Area Community College to meet the requirements of the basic program common to all professional engineering curricula include the following:

Communication Skills	8 s.h.
Analytic Geometry and Calculus	8 s.h.
Differential Equations	3 s.h.
Chemistry Principles	5 s.h.
College Physics	10 s.h.
Social Sciences/Humanities	9 s.h.
Statics of Engineering	3 s.h.

Students transferring directly to the College of Engineering must have demonstrated success in math, science, and engineering courses (generally a 2.5 or higher combined GPA in these foundation subjects, with no grade lower than a "C"). At a minimum, transfer students need to have completed at least one semester of Calculus and either Chemistry Principles or College Physics.

Environmental Science/ Environmental Policy

Drake University

An interdisciplinary program, this new major is housed in the College of Arts & Sciences. This degree is roughly 60 percent natural science and 40 percent social science and humanities. It is designed to prepare students for opportunities in several environmental fields. These include environmental analysis, in which biological, chemical, and physical tests are used to assess pollution or environmental impact; environmental management, which concerns the understanding, communication, and administration of environmental policy; and environmental conservation for work with conservation organizations or as a naturalist. Field experiences will be an important part of the program.

Students planning for this major should include the following NIACC course work:

Biology I	4 s.h.
Chemistry Principles I & II	10 s.h.
Organic Chemistry	5 s.h.
General Physics	4 s.h.
Information and Technological Literacy	3 s.h.
Introduction to Statistics	3 s.h.
Communication Skills I and II	8 s.h.
Ethics	3 s.h.
History	3 s.h.
Fine Arts Appreciation	3 s.h.
International & Multicultural Understanding	3 s.h.
Social Problems	3 s.h.
Microeconomics	3 s.h.

Many of the courses listed above also fulfill Drake Curriculum requirements. For specific Drake Curriculum (general education) information, students should access the Drake Curriculum website at <http://www.educ.drake.edu/dc> or contact the Office of Admission, 1-800-44-DRAKE, ext. 3181. It is recommended that students planning for transfer to Drake save NIACC course syllabi for in-depth review for Drake Curriculum outcomes fulfillment upon transfer.

Exercise Science

Iowa State University

This program prepares students for careers in fitness and wellness fields. Graduates are hired as exercise specialists in corporations, private health clubs, hospitals (cardiac rehabilitation) and other agencies which provide fitness/wellness activities. The program is administered through the Department of Health and Human Performance. See course recommendations listed under Physical Education-Exercise Science.

Home Economics

University of Northern Iowa

INTERIOR DESIGN

Intro to Computers/Information Systems	3 s.h.
Macroeconomics	3 s.h.
Accounting Principles I	3 s.h.

TEXTILES AND APPAREL

Macroeconomics	3 s.h.
Accounting Principles I	3 s.h.
Marketing - Elective	3 s.h.
Intro to Computers/Information Systems	3 s.h.

Iowa State University

FAMILY AND CONSUMER SCIENCES EDUCATION

The following courses, taken at North Iowa Area Community College, will meet requirements for the first two years at Iowa State University for family and consumer sciences education. Other specific programs in the College of Family and Consumer Sciences may be worked out with a counselor at North Iowa Area Community College.

Communication Skills I and II	8 s.h.
Western Civilization I and II	8 s.h.
Psychology	3 s.h.
Human Growth and Development	3 s.h.
Sociology	3 s.h.
Economics	3 s.h.
Inorganic Chemistry	10 s.h.
Organic Chemistry (add for certification)*	4 s.h.
Biological Principles	4 s.h.
Introduction to Education	3 s.h.
Essentials of Art	3 s.h.
Physical Education	2 s.h.
Nutrition	3 s.h.
American History	3 s.h.
American Government	3 s.h.
Educational Psychology	3 s.h.

Iowa State University and North Iowa Area Community College have a number of planned transfer agreements in the area of home economics. For more information, contact a NIACC counselor.

Human Services

Buena Vista University

Complete courses to satisfy A.A. degree requirements at North Iowa Area Community College.

A second major or minor is required for this degree. The following courses will apply to a business minor.

Accounting Principles I	3 s.h.
Business Law I	3 s.h.
Principles of Management	3 s.h.
Business Statistics	3 s.h.
Marketing	3 s.h.
Quantitative Methods	3 s.h.
Macroeconomics	3 s.h.
Microeconomics	3 s.h.

Upper Iowa University

RESIDENTIAL CAMPUS

Students should consider taking the following courses to meet requirements in the following majors. Completion of the A.A. degree at NIACC will meet the general education requirements.

General Psychology OR Sociology	3 s.h.
Marriage and Family	3 s.h.
Intro to Human Services	3 s.h.
State and Local Government	3 s.h.
Macroeconomics	3 s.h.
Human Growth and Development	3 s.h.

Industrial Technology

University of Northern Iowa

NIACC's Electromechanical Systems Technology (page 112) and Mechanical Design Technology (page 122) are articulated with the University of Northern Iowa's Department of Industrial Technology. The programs, with appropriate option, meet requirements for a bachelor of science degree in Electromechanical Systems, General Industry and Technology, or Manufacturing Technology at UNI.

These articulated programs allow the student to complete an associate in applied science degree in Electromechanical Systems Technology or Mechanical Design Technology while maintaining the option of transferring to the University of Northern Iowa after completing the NIACC program.

While enrolled in the Electromechanical Systems Technology or Mechanical Design Technology Programs, the following course options may be taken to maximize transfer effectiveness.

ELECTROMECHANICAL SYSTEMS TECHNOLOGY

UNI - Electro-Mechanical Systems Major

1. Industrial Supervision and Management Option
2. Engineering Technology Option

96:132 Electrical Concepts
 91:175 DC/AC Theory
 91:104 Intro to Tech Computing & CAD
 91:179 Electronic Devices & Circuits I
 91:214 Digital Electronics
 91:105 Motors, Controls, & Industrial Wiring
 91:110 Electronics Tech Internship
 91:281 Microprocessors
 91:204 Advanced Control Systems
 91:206 Computer Automated Manufacturing
 91:207 Instrumentation Technology
 92:227 Automated Manufacturing Processes
 89:150 Employment Strategies
 80:101 General Psychology
 70:140 Introductory Chemistry (ISU or UNI)
 70:280 General Physics I
 70:281 General Physics II (UNI only)
 40:140 Intro to Statistics
 40:151 College Alg & Trig I
 40:152 College Alg & Trig II
 40:240 Calculus for Business
 30:101 Comm Skills I
 30:102 Comm Skills II

MECHANICAL DESIGN TECHNOLOGY

- UNI -1. Technology Management Major
2. Manufacturing Technology Major

90:121 Intro to Drafting
 90:122 Drafting
 90:131 Drafting II
 90:133 Computer Orientation
 90:231 Machine Element Design
 91:120 Manufacturing Processes I
 91:121 Manufacturing Processes II
 91:150 Statics
 91:212 Design Research Laboratory
 91:226 Fundamentals of Unigraphics
 91:227 Fundamentals of ProEngineering
 91:240 Fluid Mechanics
 91:251 Strength of Materials
 89:150 Employment Strategies
 80:101 General Psychology
 70:122 Principles of Physics
 70:140 Introductory Chemistry
 70:280 General Physics I
 70:281 General Physics II
 40:140 Intro to Statistics
 40:151 College Alg & Trig I
 40:152 College Alg & Trig II
 40:240 Calculus For Business
 30:101 Comm Skills I
 30:102 Comm Skills II

See your counselor or program instructor for details concerning these options.

Other courses which may be taken at NIACC to meet specific University of Northern Iowa Industrial Technology major requirements:

CONSTRUCTION MANAGEMENT MAJOR
(Bachelor of Science)

Accounting Principles I	3 s.h.
Intro to Computers	3 s.h.
General Physics I	4 s.h.
General Chemistry	4 s.h.
Quantitative Methods	3 s.h.
Analytic Geometry and Calculus I	4 s.h.
Intro to Statistics	3 s.h.

ELECTRO-MECHANICAL SYSTEMS MAJOR
(Bachelor of Science)

INDUSTRIAL SUPERVISION AND MANAGEMENT OPTION

General Physics I and II	
OR	
College Physics I and II	8-10 s.h.
Accounting Principles I	3 s.h.

ENGINEERING TECHNOLOGY OPTION

Analytic Geometry/Calculus I and II	8 s.h.
General Physics I and II	
OR	
College Physics I and II	8-10 s.h.

TECHNOLOGY MANAGEMENT
(Bachelor of Arts)

Precalculus	4 s.h.
OR	
Introduction to Statistics	3 s.h.
Principles of Physics I	4 s.h.

MANUFACTURING TECHNOLOGY MAJOR
(Bachelor of Science)

Analytic Geometry and Calculus I	4 s.h.
General Physics I AND	
College Physics I	8-10 s.h.
Introduction to Statistics	3 s.h.

TECHNOLOGY EDUCATION MAJOR - TEACHING
(Bachelor of Arts)

General Physics I	4 s.h.
Introduction to Statistics	3 s.h.
Introduction to Teaching	3 s.h.
Human Growth and Development	3 s.h.
Educational Psychology	3 s.h.
Ed Measurement & Evaluation	2 s.h.
Mainstreaming the Exceptional Student	2 s.h.

Information Systems Technology/MIS

Iowa State University

IST Major Courses	40-44 s.h.
Communication Skills I and II	8 s.h.
Accounting Principles I and II	6 s.h.
Microeconomics	3 s.h.
Macroeconomics	3 s.h.
Quantitative Methods	3 s.h.

Buena Vista University

IST Major Courses	40-44 s.h.
Communication Skills I, II	8 s.h.
Accounting Principles I, II	6 s.h.
Intermediate Algebra	4 s.h.
Principles of Management	3 s.h.
Business Law I	3 s.h.
Quantitative Methods	3 s.h.
Marketing	3 s.h.
Business Statistics	3 s.h.
Introduction to MIS	3 s.h.
Introduction to Programming	4 s.h.
Analytic Geometry and Calculus I	4 s.h.
Macroeconomics	3 s.h.
Microeconomics	3 s.h.

University of Northern Iowa

IST Major Courses	40-44 s.h.
Communication Skills I, II	8 s.h.
Western Civ I or II	4 s.h.
Encounters in Humanities	2 s.h.
Intro to Statistics	3 s.h.
Social Science elective (see advisor)	3 s.h.
Quantitative Methods	3 s.h.
Macroeconomics	3 s.h.
Accounting Principles I or II, Business Statistics, or Microeconomics	3 s.h.
Physical Education	2 s.h.

Upper Iowa University

IST Major Courses	40-44 s.h.
Communication Skills I, II	8 s.h.
Ethics	3 s.h.
Macroeconomics	3 s.h.
Microeconomics	3 s.h.
Introduction to MIS	3 s.h.
Introduction to Statistics	3 s.h.

**Discussions are currently underway to articulate the IST program with other colleges and universities in Iowa and Minnesota. Contact an advisor or counselor for updated information on IST program articulation.*

Journalism

Drake University

JOURNALISM AND MASS COMMUNICATION
Advertising (Management or Creative Track), Public Relations, Electronic Media (Broadcast News, Radio-Television), News-Internet, Magazines.

A student wishing to enter the School of Journalism and Mass Communication at Drake University must have a cumulative GPA of 2.25. Courses which may be taken at NIACC are listed below:

Communication Skills I	4 s.h.
Communication Skills - Speaking	2 s.h.
History	3 s.h.
Fine Arts Appreciation	3 s.h.
Life and Physical Sciences (must include lab)	8 s.h.
Mathematics	3 - 4 s.h.
Values and Ethics	3 s.h.
International/Multicultural Awareness	3 s.h.
Introduction to Journalism	3 s.h.
News Writing and Reporting	3 s.h.
Principles of Advertising (advertising majors)	3 s.h.

Many of the courses listed above also fulfill Drake Curriculum requirements. For specific Drake Curriculum (general education) information, students should access the Drake Curriculum website at <http://www.educ.drake.edu/dc> or contact the Office of Admission, 1-800-44-DRAKE, ext. 3181. It is recommended that students planning for transfer to Drake save NIACC course syllabi for in-depth review for Drake Curriculum outcomes fulfillment upon transfer.

Iowa State University

All majors in general journalism and science journalism must meet the requirements of the College of Liberal Arts and Sciences. In addition, Principles of Advertising (3 s.h.), Introduction to Photography (3 s.h.), Creative Writing (3 s.h.), Introduction to Journalism (3 s.h.), and Newswriting and Reporting (3 s.h.) should be considered.

University of Iowa

All majors in the School of Journalism and Mass Communication at the University of Iowa must meet the general education requirements of the College of Liberal Arts at that institution (see curriculum under Liberal Arts). The following courses are recommended for an associate in arts degree:

Principles of Economics	6 s.h.
Psychology	3 s.h.
Foreign Language (fourth level)	0-16 s.h.
Government	3 s.h.
Sociology	3 s.h.
Introduction to Journalism	3 s.h.
Newswriting and Reporting	3 s.h.

Admission to the major is competitive. Applicants must have taken or be taking two prerequisite foundation courses, the rhetoric courses, and have completed a minimum of 45 s.h. Contact the School of Journalism for application and deadline information.

Law

Drake University

Applicants to accredited colleges of law must have earned a baccalaureate degree. Drake offers a pre-law program of study which is adaptable to the requirements of any designated major, as well as an interdisciplinary major in Law, Politics & Society.

Students may want to include the following courses in their NIACC program of study:

Communication Skills I & II	8 s.h.
Speech	2 s.h.
College Algebra & Trigonometry I OR Analytic Geometry and Calculus I	4 s.h.
Foreign Language	0-16 s.h.
International/Multicultural Awareness	3 s.h.
Fine Arts	3 s.h.
Principles of Economics	6 s.h.
Ethics	3 s.h.
American Government	3 s.h.
Sociology	3 s.h.
Psychology	3 s.h.
Physical Sciences (must include lab)	8 s.h.

Many of the courses held above also fulfill Drake Curriculum requirements. For specific Drake Curriculum (general education) requirements, prospective students should access the Drake Curriculum website at www.educ.drake.edu/dc or contact the Office of Admission, 1-800-44-DRAKE, ext. 3181. It is recommended that students planning for transfer to Drake save NIACC course syllabi for in-depth review for Drake Curriculum outcomes fulfillment upon transfer.

University of Iowa

An applicant for admission to the College of Law at the University of Iowa must have completed a baccalaureate degree prior to admission. The baccalaureate degree may be received in any major. Recommended courses which the student may take at North Iowa Area Community College toward this degree are:

Communication Skills I & II	8 s.h.
Western Civilization	8 s.h.
Foreign Language (fourth level)	0-16 s.h.
Sociology and Social Problems	6 s.h.
World Literature	6 s.h.
Mathematics	3-5 s.h.
Science	4-5 s.h.
Accounting	6 s.h.
Psychology	6 s.h.
Economics	6 s.h.
American Government	6 s.h.

Complete additional courses to satisfy A.A. degree requirements at North Iowa Area Community College.

Liberal Arts/Undecided

Associate in Arts--purpose of the degree includes:

1. Provide a degree goal for students who choose to follow a course of study which is specifically designed for transfer to a baccalaureate degree program.
2. Provide the essential general education, grade, and semester hour requirements for upper division status at most senior colleges and universities.

Requirements for the degree follow:

1. Completion of sixty (60) semester hours of work consisting of courses in which the principal design is for a baccalaureate program.
2. One half of the required semester hours must be completed in residence at North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum cumulative grade point average of 2.00 (C). Includes transfer work from other institutions.
4. Completion of the following general education core with a minimum of 40 semester hours.
 - a. Communications. 8 s.h.
This requirement can be satisfied by baccalaureate-oriented communications or speech courses with a minimum of two courses in English composition.
 - b. Social Sciences 8 s.h.
 - c. Humanities 8 s.h.
 - d. Natural Sciences 8 s.h.
Must include one math and one science course
 - e. Distributed Requirement. 8 s.h.
To be taken from among the four divisions above.

Medical Technology (Clinical Lab Science)

To qualify for training at a school for medical technologists approved by the American Medical Association, a student must have at least three years of college work which includes the successful completion of at least 94 semester hours of work. Courses for Medical Technology (Clinical Lab Science) which may be obtained at North Iowa Area Community College are listed below:

Communication Skills I & II.	8 s.h.
Chemistry Principles.	10 s.h.
Organic Chemistry	8 s.h.
Quantitative Analysis	4 s.h.
Biology I & II.	8 s.h.
Microbiology.	4 s.h.
Anatomy and Physiology	8 s.h.
College Mathematics (including Statistics) and Algebra and Trigonometry II or PreCalc.	7 s.h.
Foreign Language	8 s.h.
Principles of Physics (recommended)	4 s.h.
Social Science Electives	8 s.h.

Electives, as for any professional career, should include broad general education in English, social sciences, arts, and humanities. Advanced mathematics and typing will also be helpful.

Students wishing to qualify for the bachelor's degree will need to meet the core or general education requirements of the college or university to which they plan to transfer and should, therefore, consult with the counselors at North Iowa Area Community College to determine these additional requirements.

Those interested in attending the University of Iowa should see a North Iowa Area Community College counselor for specific information.

Mortuary Science

Any person desiring to enter the funeral directing profession shall be required to appear before a member of the Board of Mortuary Science Examiners for a personal interview and registration, prior to entering a College of Mortuary Science, approved by the Iowa State Board of Mortuary Science Examiners.

Recommended courses:

- a. Communications. Eight semester hours shall consist of English, Speech, or Writing Communications.
- b. Natural Sciences. Nine semester hours shall consist of Chemistry, Biology I and II, Anatomy and Physiology, Histology, and Microbiology.
- c. Social Sciences. Nine semester hours shall consist of Psychology or Sociology.
- d. Business/Economics. Nine semester hours shall consist of Business Management, Accounting, Business Law, Computer Sciences, or Economics.
- e. Philosophy/Humanities. Nine semester hours shall consist of Philosophy, Religion, Art, or Music.
- f. Electives. Nineteen semester hours shall consist of student's choice.

For more information contact: Board of Mortuary Science, Iowa Department of Public Health, 321 East 12th Street, Lucas State Office Building, Des Moines, IA 50319-0075.

Music

The following courses may be taken at North Iowa Area Community College to meet the requirements for a degree in music or music education:

Literature	6 s.h.
Foreign Language	0-8 s.h.
Communication Skills I and II	8 s.h.
Theory of Music I, II, III, and IV	16 s.h.
Applied Music	4-8 s.h.
Choir and/or Band	4-8 s.h.
Western Civilization	8 s.h.
Math/Science	8 s.h.

American Government	3 s.h.
Sociology	3 s.h.
Human Growth and Development	3 s.h.
Introduction to Teaching	3 s.h.

Students planning to major in music should consult with counselors and personnel in the Department of Music in preparing schedules of classes. The student should also correspond with the head of the Department of Music of the college to which he/she will transfer to obtain a verification of his/her complete program at North Iowa Area Community College.

Simpson College

Courses which may be taken at NIACC to complete major requirements at Simpson College:

Music Theory I	4 s.h.
Music Theory II	4 s.h.
Music Theory III	4 s.h.
Music Theory IV	4 s.h.
Applied Music Piano	1-2 s.h.
Applied Music Voice	1-2 s.h.
Applied Music Instrumental	1-2 s.h.
Concert Chorus	1-4 s.h.
Band	1-4 s.h.
Jazz Band	1-4 s.h.

Nursing

University of Iowa

BACHELOR OF SCIENCE IN NURSING (BSN) DEGREE
(at Iowa City)

A cooperative, articulated curriculum with the University of Iowa College of Nursing. The baccalaureate degree nursing student should take the following courses at NIACC:

Communication Skills I and II	8 s.h.
Principles of Physics or Physical Science*	4 s.h.
Introductory Chemistry or Gen. Chem. Prin*	4 s.h.
Biological Principles	4 s.h.
Psychology	3 s.h.
Anatomy and Physiology I and II	8 s.h.
Microbiology	4 s.h.
Humanities, Fine Arts, Philosophy**	6 s.h.
Western Civilization	4 s.h.
Intro to Statistics**	3 s.h.
Human Growth and Development	3 s.h.
Cultural Anthropology or Cultural Diversity**	3 s.h.
Foreign Language *	0-8 s.h.

*Math, physics, chemistry, and foreign language requirement depend on high school preparation.

**Some course work may be completed after matriculation at the University of Iowa if student is unable to complete as prenursing.

A minimum GPA of 2.50 is required to apply for admission. Admission deadlines are January 15 for summer (R.N. program only), March 1 for fall, and October 1 for spring. Admission is competitive.

BACHELOR OF SCIENCE IN NURSING (BSN) DEGREE
RN TO BSN PROGRESSION PROGRAM
(at North Iowa Area Community College)

The University of Iowa College of Nursing offers its RN-BSN Progression Program at the NIACC campus. Course work can be completed locally. This program is designed for diploma and associate degree registered nurses who desire a BSN Degree.

The associate degree nurse is assumed to have competence in microbiology, anatomy, physiology, nutrition, introductory psychology and sociology, life-span human development and behavior, communication skills, and computer skills, as well as basic nursing competence, all required as part of the Associate Degree Nursing curriculum at NIACC. Prospective students can be assured that they have earned at least half of the 128 semester hours required for the BSN upon graduation from the NIACC ADN Program.

Most students may enroll in supporting and general education courses at NIACC and are strongly encouraged to seek early advising with the RN-BSN Faculty Coordinator. For further information contact the RN-BSN Program office in Iowa City at 1-800-553-4692, ext. 7020, or the RN-BSN Faculty Coordinator located on the NIACC campus at 1-888-466-4222, ext. 4338, or visit our web site at: www.nursing.uiowa.edu. Choose Academic Programs and Degree Options for information regarding the RN to BSN program.

MASTER OF SCIENCE IN NURSING (MSN) DEGREE
(University of Iowa at North Iowa Area Community College)

The University of Iowa College of Nursing offers a distance education MSN degree. Course work leading to a Master of Science degree in Adult and Older Adult Nursing will be offered via Iowa Communications Network (ICN) classes. Since all courses build upon each other, students who have started the program sequence in fall 2000 should continue to enroll in the two courses offered each semester through spring 2004.

There must be a minimum enrollment of at least three persons at each of the ICN classrooms and overall registration must be sufficient to meet the costs of providing the courses.

For more information regarding formal MSN application, contact Tracy Middleton at 319-384-4667 or call toll-free 1-800-272-6430, extension 4667, or e-mail tracy-middleton@uiowa.edu.

Occupational Therapy

St. Ambrose University

The following courses may be taken at NIACC. Full-time students will take these courses over a three-semester period, after which they will need to transfer to St. Ambrose.

Biological Principles and Lab	4 s.h.
Introductory Chemistry	
OR	
Principles of Physics and Lab	4 s.h.
College Algebra and Trigonometry	
or higher	4 s.h.
Communication Skills I OR	4 s.h.
Public Speaking	2 s.h.
General Psychology	3 s.h.
Human Growth and Development	3 s.h.
Abnormal Psychology	3 s.h.
Literature	3 s.h.
Philosophy	3 s.h.
Art, Music, Theater	6 s.h.
American History	3 s.h.
Medical Terminology	1 s.h.
Anatomy and Physiology	8 s.h.
Intro to Sociology	3 s.h.
Intro to Computer/Information Systems	3 s.h.

1. Students must achieve and maintain a minimum 2.8 GPA.
2. Students should apply for admission to St. Ambrose as soon as they begin their third semester at NIACC.
3. As soon as students are enrolled at St. Ambrose, they should apply for Occupational Therapy.
4. Students must be able to document experience in an occupational therapy setting of at least 50 clock hours.
5. There is no guarantee regarding admission.

Optometry

The following courses are recommended for a student interested in optometry:

Communication Skills I and II	8 s.h.
Biology I and II	8 s.h.
Physics	8 s.h.
Inorganic Chemistry	10 s.h.
Psychology	3 s.h.
Humanities Electives	6 s.h.
Social Science Elective	3 s.h.
Organic Chemistry	4-10 s.h.
Microbiology	4 s.h.
Anatomy and Physiology I and II	8 s.h.
Analytic Geometry and Calculus I	4 s.h.

Plus electives to total 60 s.h.

There are additional requirements which vary with each optometry school or college.

Pharmacy

Drake University

DOCTOR OF PHARMACY

Applications for admission to the B.S. in Pharmaceutical Sciences (non-licensure) program will be reviewed on a rolling admission basis. All applicants for admission into the Drake Doctor of Pharmacy degree program are required to submit the Pharmacy Supplement Application Form (PSAF) in addition to the regular application for admission.

Applicants for admission into the pre-professional Pharm.D. program are required to have a 2.50 minimum cumulative GPA on a 4.0 scale for all course work completed, and will be considered for admission on a rolling basis for the fall term. Due to the sequence of courses in the pharmacy curriculum, transfer students will be considered for admission into the preprofessional program for the spring term on an individual basis.

Applicants for admission into the professional Pharm.D. program are required to have a 2.75 minimum cumulative GPA on a 4.0 scale for all course work completed and an official PCAT test score. They should have completed at least 60 semester hours of course work, including the designated (*) courses below or their equivalent at other institutions, by the beginning of the term they want to enroll in the program. Professional Pharm.D. program applicants must sit for the PCAT no later than January of the year they apply for admission. Interviews for admission to the professional Pharm. D. Program generally begin in the fall of the year prior to desired term of admission; notification of admission begins January 1 and continues until all seats have been filled. Applications submitted after March 1 will be considered on a space-available basis only. Admission to the professional Pharm.D. program in the spring term is not available. Please contact a Drake admission counselor for more detailed information.

The Drake College of Pharmacy and Health Sciences suggests the following curriculum at NIACC.

Communication Skills I	4 s.h.
Speech	2 s.h.
*Chemistry Principles I & II	10 s.h.
*Organic Chemistry I & II	10 s.h.
*Biological Principles I & II	8 s.h.
*Microbiology	4 s.h.
*Analytic Geometry and Calculus I	4 s.h.
*Intro to Statistics	3 s.h.
*Intro to Computers	3 s.h.

*Required for entry into the professional program.

For specific Drake Curriculum (general education) requirements, students should access the Drake Curriculum website at <http://www.educ.drake.edu/dc> or contact the Office of Admission, 1-800-44-DRAKE, ext. 3181. It is recommended that students planning for transfer to Drake save NIACC course syllabi for in-depth review for Drake Curriculum outcomes fulfillment upon transfer.

University of Iowa

A student may attend North Iowa Area Community College for two years of pre-pharmacy.

Courses which should be taken at North Iowa Area Community College are:

- Biology I and II 8 s.h.
- Communication Skills I and II 8 s.h.
- Chemistry Principles I and II 10 s.h.
- Analytic Geometry and Calculus I 4 s.h.
- *Principles of Physics 4 s.h.
- Organic Chemistry I & II 10 s.h.
- Anatomy & Physiology I & II 8 s.h.
- Microbiology 4 s.h.
- Microeconomics 3 s.h.
- Statistics 3 s.h.
- **General Education Electives 12 s.h.

*Physics required for students who haven't taken a full year during high school.

**A minimum of 15 s.h. of general education electives required for admission. Total of 20 s.h. required for graduation. Recommended electives include Computer Science and an Ethics course.

Physical Education

The following courses may be taken at North Iowa Area Community College to meet the requirements for a degree in physical education:

- Communication Skills I and II 8 s.h.
- Games and Officiating I and II 4 s.h.
- Introduction to Physical Education 2 s.h.
- Anatomy and Physiology I and II 8 s.h.
- First Aid and Personal Safety 1 s.h.
- Introduction to Teaching 3 s.h.
- Human Growth and Development 3 s.h.
- Psychology 3 s.h.
- American History or American Government 3 s.h.
- Care and Prevention of Athletic Injuries 2 s.h.
- Educational Media Techniques 3 s.h.
- Health and Nutrition 3 s.h.
- Humanities Electives 8 s.h.
- Educational Psychology 3 s.h.

Students planning to major in physical education should consult with counselors and personnel in the Department of Physical Education in preparing schedules of classes. The student should also correspond with the head of the Department of Physical Education of the college to which he/she will transfer to obtain a verification of his/her complete program at North Iowa Area Community College.

Iowa State University

The following courses at NIACC will meet the requirements for Exercise and Sport Science programs at Iowa State University administered by the Department of Health and Human Performance. Please see a NIACC counselor for clarification or call an academic advisor at Iowa State University: 515-294-2029.

GENERAL EDUCATION

- Anatomy and Physiology 4 s.h.
- Intro to Computers (non-teacher ed only) . . . 3 s.h.
- Quant. Methods 3 s.h.
- General Psychology 3 s.h.
- Sociology 3 s.h.
- Communication Skills I 4 s.h.
- Communication Skills II 4 s.h.

TEACHER LICENSURE

- Intro to Teaching 3 s.h.
- First Aid and Personal Safety 1 s.h.
- Human Growth & Development 3 s.h.
- Nutrition 3 s.h.
- Educational Psychology 3 s.h.

EXERCISE SCIENCE

- Principles of Physics OR Gen. Physics I 4 s.h.
- General Chemistry I 4 s.h.
- General Chemistry I Lab 1 s.h.
- Nutrition 3 s.h.

ATHLETIC TRAINING

- Principles of Physics OR General Physics I . . 4 s.h.
- General Chemistry I 4 s.h.
- General Chemistry I Lab 1 s.h.
- Nutrition 3 s.h.

SPORT MANAGEMENT

- Accounting Principles I 3 s.h.
- Microeconomics 3 s.h.
- Macroeconomics 3 s.h.

Simpson College

Courses which may be taken at NIACC to meet major requirements at Simpson College:

- Intro to Physical Education 2 s.h.
- Care & Prevention of Athletic Injuries 2 s.h.
- First Aid and Personal Safety 1 s.h.
- Kinesiology 3 s.h.
- Games and Officiating I and II 6 s.h.
- Biology I OR Human Biology OR
Anatomy and Physiology 8 s.h.

Upper Iowa University

RESIDENTIAL CAMPUS

Students should consider taking the following courses to meet requirements in the following majors. Completion of the A.A. degree at NIACC will meet the general education requirements.

FITNESS MAJOR

- Anatomy and Physiology I 4 s.h.
- Kinesiology 3 s.h.
- Physical Fitness I 1 s.h.
- Physical Fitness Lab 1 s.h.
- Principals of Management 3 s.h.
- Nutrition 3 s.h.

SPORTS SCIENCE MAJOR

- General Chemistry I 5 s.h.
- General Chemistry II 5 s.h.
- Nutrition 3 s.h.
- Anatomy and Physiology I 4 s.h.

Kinesiology	3 s.h.
General Physics I	4 s.h.
Organic Chemistry I	5 s.h.
Intro to Statistics	3 s.h.

ATHLETIC TRAINING

Nutrition	3 s.h.
Anatomy & Physiology I	4 s.h.
Kinesiology	3 s.h.
General Psychology	3 s.h.

Physical Therapy**University of Iowa**

Physical Therapy programs are highly selective. The University of Iowa program is a masters degree and first requires completion of a bachelor's degree. Include the following North Iowa Area Community College courses:

Communication Skills I and II	8 s.h.
Biology I and II	8 s.h.
Chemistry	10 s.h.
Physics	8 s.h.
Psychology	3 s.h.
Algebra and Trigonometry II	4 s.h.
Foreign Language	0-16 s.h.
Anatomy and Physiology I and II	8 s.h.
Intro to Statistics	3 s.h.

General education courses to complete the associate in arts degree. Work experience in a physical therapy setting is very important as an admissions criterion.

Physician**University of Iowa**

Prior to entrance into medical school, each applicant must:

1. have received the baccalaureate degree; or
2. have completed three years (94 s.h.) of a combined baccalaureate-medicine curriculum which qualifies him/her to receive the baccalaureate degree on completion of the first year in medicine; or
3. have completed three years (94 s.h.) of a baccalaureate program meeting all of the general graduation requirements of the college he/she is attending.

The completion of a four-year baccalaureate degree in a liberal arts college is strongly recommended, and students having a bachelor's degree will be given preference. However, a student may apply for admission to the College of Medicine upon the completion of 94 semester hours of work in a college of liberal arts with an overall grade point average of 2.5. Approximately two-thirds of these hours may be met by taking the courses listed below at North Iowa Area Community College. The Medical College Admissions Test (MCAT) will need to be taken.

Communication Skills I and II	8 s.h.
Chemistry Principles I & II	10 s.h.

Organic Chemistry	10 s.h.
Precalculus	4 s.h.
Physics	8 s.h.
Foreign Language	0-16 s.h.
Biology I and II	8 s.h.

General education to complete associate in arts degree.

Physician Assistant**University of Iowa**

Communication Skills I and II	8 s.h.
Chemistry Principles I and II	10 s.h.
Organic Chemistry	10 s.h.
Biology I and II	8 s.h.
Precalculus	4 s.h.
Physics	8 s.h.
Foreign Language	0-16 s.h.
Foreign Civilization & Culture	3 s.h.
Introduction to Statistics	3 s.h.

General education electives to complete associate in arts degree.

In the selection process of physician assistant candidates, work experience in a health care setting is very important as an admissions criterion.

This is a graduate program at Iowa and is highly competitive. See your counselor for more information.

Political Science**Buena Vista University**

Courses which may be taken at North Iowa Area Community College to meet specific major requirements at Buena Vista University:

Intro to American Government	3 s.h.
American State and Local Government	3 s.h.
Social Problems	3 s.h.

Complete additional courses to satisfy A.A. degree requirements at North Iowa Area Community College. A second major or minor is required for this degree.

Psychology

Intermediate Algebra	4 s.h.
General Psychology	3 s.h.
Child Psychology	3 s.h.

Students should correspond with the college or university of their choice to determine if that college requires science and/or foreign language.

Buena Vista University

Courses which may be taken at North Iowa Area Community College to meet specific major requirements at Buena Vista University:

General Psychology	3 s.h.
Child Psychology (as an elective)	3 s.h.
Intermediate Algebra	4 s.h.

Complete additional courses to satisfy A.A. degree requirements at North Iowa Area Community College.

A second major or minor is required for this degree.

Simpson College

Courses which may be taken at North Iowa Area Community College to meet major requirements at Simpson College:

Quantitative Methods OR	
Intermediate Algebra	3-4 s.h.
General Psychology	3 s.h.
Human Growth & Development	3 s.h.
Child Psychology (elective)	3 s.h.
Biological Principles I and Lab	4 s.h.
Communication Skills I and II	8 s.h.

Complete additional courses to satisfy A.A. degree.

Upper Iowa University

RESIDENTIAL CAMPUS

Students should consider taking the following courses to meet requirements in the following majors. Completion of the A.A. degree at NIACC will meet the general education requirements.

General Psychology	3 s.h.
Intro to Human Services	3 s.h.
Child Psychology	3 s.h.
Human Growth and Development	3 s.h.
Intro to Statistics	3 s.h.

Public Relations

This major has a wide variety of preparation possibilities and should be discussed with your counselor.

Radiology

(Four-Year Degree)

The requirements may be met by selecting courses from the list outlined below. These courses are offered at North Iowa Area Community College.

Biology I and II	8 s.h.
Anatomy and Physiology	8 s.h.
Communication Skills I & II	8 s.h.
Western Civilization	8 s.h.
Algebra and Trigonometry I & II	8 s.h.
Philosophy	3 s.h.
General Physics	8 s.h.
Chemistry	8 s.h.
Social Science Electives	6 s.h.

Recreation

A recreation major may have several different areas of emphasis. The following courses should be taken at NIACC:

Communication Skills I and II	8 s.h.
Games and Officiating I and II	4 s.h.
Introduction to Physical Education	2 s.h.
Psychology	3 s.h.

Human Growth and Development	3 s.h.
Essentials of Art	3 s.h.
Introduction to Teaching	3 s.h.
Health and Nutrition	3 s.h.
First Aid and Personal Safety	1 s.h.
Care and Prevention of Athletic Injuries	2 s.h.
Educational Media Techniques	3 s.h.

Rehabilitation Services

The National Rehabilitation Institute is housed in the School of Education at Drake University. The program emphasizes administration, providing the knowledge and experiences necessary to function as a community rehabilitation agency manager. The program curriculum focuses on a blend of course work and field experiences. Designated as the Midwest Regional program, Federal grant tuition assistance is available to cover 46 hours of the rehabilitation core curriculum. To qualify, students must gain admission to Drake University and apply to the National Rehabilitation Institute. There is an interview process for the awarding of funds. Students should also plan to file for other types of financial aid.

Recommended courses for students planning for this major include the following NIACC course work:

Communication Skills I	4 s.h.
Communication Skills - Speaking	2 s.h.
History	3 s.h.
Fine Arts Appreciation	3 s.h.
Life and Physical Sciences (must include lab)	8 s.h.
Mathematics	3-4 s.h.
Values and Ethics	3 s.h.
International/Multicultural Awareness	3 s.h.
Social Sciences	6 s.h.

Many of the courses listed above also fulfill Drake Curriculum requirements. For specific Drake Curriculum (general education) information, students should access the Drake Curriculum website at <http://www.educ.drake.edu/dc> or contact the Office of Admission, 1-800-44-DRAKE, ext. 3181. It is recommended that students planning for transfer to Drake save NIACC course syllabi for in-depth review for Drake Curriculum outcomes fulfillment upon transfer.

Social Work

General education includes the following courses:

Communication Skills I and II	8 s.h.
Sociology	3 s.h.
Social Problems	3 s.h.
Marriage and Family	3 s.h.
Psychology	3 s.h.
Natural Science Electives	8 s.h.
Humanities Electives	6 s.h.
Human Growth and Development	3 s.h.
Macroeconomics	3 s.h.
Public Speaking	2 s.h.
American History	6 s.h.

Students should correspond with the college or university of their choice to determine if that college requires science and/or foreign language. Students should also be certain their math background is sufficient for a statistical course.

Wartburg College

Communication Skills I and II	8 s.h.
General Psychology	3 s.h.
Sociology	3 s.h.
Macroeconomics or Microeconomics	3 s.h.
Intro to American Government	3 s.h.
Western Civilization	4-8 s.h.
Biological Prin & Lab	4 s.h.
Intermediate Algebra (or higher math)	3-4 s.h.
Humanities	3-6 s.h.

Sport Management

Iowa State University

This program prepares students for a variety of sport specialist positions in professional/college sports organizations, health and sport clubs, community recreation programs, business and nonprofit agencies such as YWCA/YMCA's. This program is administered through the Department of Health and Human Performance. (See course recommendations under Physical Education.)

Theatre

Communication Skills I and II	8 s.h.
Introduction to Theatre, Television, and Film	3 s.h.
Introduction to Acting	3 s.h.
Stagecraft	3 s.h.
Public Speaking	2 s.h.
Introduction to Poetry and Drama	3 s.h.
Introduction to Short Story and Novel	3 s.h.
World Literature I and II	6 s.h.
Oral Interpretation of Literature	3 s.h.

Simpson College

Courses which may be taken at North Iowa Area Community College to complete major requirements at Simpson College:

Oral Interpretation of Literature	3 s.h.
Intro to Theatre/TV/Film	3 s.h.
Stagecraft	3 s.h.
Intro to Acting	3 s.h.

Also required for Theatre Arts with Education Program:

Public Speaking	2 s.h.
Group Discussion	2 s.h.
Newswriting & Reporting	3 s.h.

Veterinary Medicine

Iowa State University

(GPA is a competitive factor for admission.)

Applicants for admission to the College of Veterinary Medicine must have attended a regionally accredited college or university, have completed 40 semester credits prior to the deadline for filing an application for admission, and have completed 60 semester credits prior to the end of the spring term in which the applicant seeks to be admitted.

Credits earned must include the following:

Communication Skills I and II*	8 s.h.
Chemistry Principles I and II	10 s.h.
Organic Chemistry I and II	10 s.h.
General Physics I and II	8 s.h.
Biology I and II	8 s.h.
Genetics	4 s.h.
Anatomy and Physiology	4 s.h.
Humanities and/or Social Sciences	9 s.h.

* Must take both courses for 4 semester hour credits to meet the Public Speaking requirement.

Online Associate Degree Through NIACC

Students may now earn an A.A. Degree through NIACC online. *In order to earn an Associate Degree from NIACC, you will need a total of 60 semester hours of credit.* See the listing below and contact the Evening Dean for further information at 1-888-466-4222, ext. 4326, or (641)422-4326.

Degree Requirement	Semester Hours
Communications	8 s.h.
<i>Communication Skills I (30:101)</i>	<i>3 s.h.</i>
<i>Communication Skills II (30:102)</i>	<i>3 s.h.</i>
<i>Public Speaking (85:101)</i>	<i>2 s.h.</i>
Humanities	8 s.h.
<i>Art History I (10:102)</i>	<i>3 s.h.</i>
<i>Art History II (10:103)</i>	<i>3 s.h.</i>
<i>American History to 1877 (40:140)</i>	<i>3 s.h.</i>
<i>American History 1877 to Present (40:141)</i>	<i>3 s.h.</i>
Natural Sciences	8 s.h.
<i>Introduction to Chemistry (70:140)</i>	<i>4 s.h.</i>
<i>Math for Decision Making (40:121)</i>	<i>3 s.h.</i>
<i>Biological Principles (70:101)</i>	<i>3 s.h.</i>
<i>Introduction to Statistics (40:140)</i>	<i>3 s.h.</i>
Social Sciences	8 s.h.
<i>Macroeconomics (80:133)</i>	<i>3 s.h.</i>
<i>Microeconomics (80:134)</i>	<i>3 s.h.</i>
<i>General Psychology (80:101)</i>	<i>3 s.h.</i>
<i>Personal Finance (80:135)</i>	<i>3 s.h.</i>
<i>Geography of the Non-Western World (80:152)</i>	<i>3 s.h.</i>
<i>Human Growth & Development (80:230)</i>	<i>3 s.h.</i>
Distributed Requirement <i>Choose from courses above (under Communications, Humanities, Natural Sciences, and Social Sciences)</i>	8 s.h.
Electives	20 s.h.
<i>Career Decision Making (89:152)</i>	<i>2 s.h.</i>
<i>Introduction to Entrepreneurship (15:171)</i>	<i>3 s.h.</i>
<i>Keyboarding Level I (15:112)</i>	<i>1 s.h.</i>
<i>Keyboarding Level II (15:113)</i>	<i>1 s.h.</i>
<i>Computer Literacy (15:114)</i>	<i>1 s.h.</i>
<i>Accounting Principles I (15:150)</i>	<i>3 s.h.</i>
<i>Accounting Principles II (15:151)</i>	<i>3 s.h.</i>
<i>Career Math I (91:101)</i>	<i>4 s.h.</i>
<i>Medical Terminology I (15:251)</i>	<i>3 s.h.</i>
<i>Medical Terminology II (15:252)</i>	<i>3 s.h.</i>
<i>Word Processing</i>	<i>2 s.h.</i>
<i>Communications I</i>	<i>3 s.h.</i>
<i>Business Communications</i>	<i>3 s.h.</i>
<i>Visual Communication</i>	<i>3 s.h.</i>
<i>Web Design</i>	<i>3 s.h.</i>

GENERAL EDUCATION AND COURSE CATEGORIES

North Iowa Area Community College considers education to be the foundation of a democratic society. At the core of the educational experience is general education, an ongoing endeavor that engages students in acquiring the knowledge and tools necessary to understand their environment and contribute to their communities. General education provides the diverse experiences in learning that teach generalized skills in communication, critical analysis, research, human relations, and technology and survey subject matter to allow for applications of this learning in the classroom and community.

In response to a renewed emphasis placed on general education by the North Central Association of Colleges and Universities regional accrediting body, the College, through its Institutional Effectiveness Committee, reexamined the courses in its general education distribution requirements. As a result of this study, the College has determined that its general education course work, taken as a whole, will aid the development of research, critical thinking, communication, global awareness, interpersonal, aesthetic, technological, and quantitative skills in its graduates. In order for a class to be included in the following distribution requirements, it must incorporate at least six of the eight general education skills identified by the Institutional Effectiveness Committee. *To measure the effectiveness of its general education program, NIACC will require all students to take the Academic Profile examination as a graduation requirement.*

Each of NIACC's degree programs provides varying levels of general education skill development through their distribution requirements:

- * To earn an **Associate in Arts** degree, a student must complete a minimum of 8 semester hours (s.h.) of credit in each of the communication, humanities, social science, and natural science distribution categories listed below plus an additional 8 s.h. of credit selected from any of the aforementioned categories for a total minimum of 40 s.h. of general education credit within the degree program. Within the natural science category, a student must select at least one mathematics and one science course.
- * To earn an **Associate in Science** degree, a student must complete a minimum general education core of 37 s.h. distributed in the following fashion: communications (8 s.h.); humanities and/or social science (9 s.h.); and natural science (20 s.h.). Within the natural science category, a student must select at least one mathematics and one science course.

- * To earn an **Associate in Science in Business** degree, a student must complete a minimum general education core of 20 s.h. distributed in the following fashion; communications (8 s.h.); humanities and/or social science (9 s.h.); and natural science (3 s.h.).
- * General education requirements for the **Associate in Applied Science** degree vary according to the major selected. Please consult with an advisor or a faculty member in the major field for further information.

Listed below are the general education course categories (communications, humanities, natural science, and social science), as well as those courses listed under the business and elective categories.

COMMUNICATIONS

30:101	Communication Skills I	4	s.h.
30:101C	Communication Skills I	3	s.h.
30:102	Communication Skills II	4	s.h.
30:102C	Communication Skills II	3	s.h.
30:110	Oral Interpretation of Literature	3	s.h.
85:101	Public Speaking	2	s.h.
85:105	Group Discussion	2	s.h.

HUMANITIES

10:100	Encounters in Humanities	2	s.h.
10:101	Essentials of Art	3	s.h.
10:102	Art History I	3	s.h.
10:103	Art History II	3	s.h.
10:112	Art in the Elementary School	3	s.h.
10:120	Drawing	3	s.h.
10:130	Ceramics	3	s.h.
10:150	Creative Photography	3	s.h.
10:151	Intermediate Creative Photography	3	s.h.
10:201	2-D Design	3	s.h.
10:202	Graphic Design	3	s.h.
10:220	Digital Illustration	3	s.h.
30:110	Oral Interpretation of Literature	3	s.h.
30:111	Introduction to Poetry/Drama	3	s.h.
30:112	Introduction to Short Story/Novel	3	s.h.
30:121	Introduction to Journalism	3	s.h.
30:122	News Writing and Reporting	3	s.h.
30:201	World Literature I	3	s.h.
30:202	World Literature II	3	s.h.
30:203	Minority Literature: African/American	3	s.h.
30:204	Minority Literature: American Indian	3	s.h.
30:210	Children's Literature	3	s.h.
35:110	Beginning Spanish I	4	s.h.
35:111	Beginning Spanish II	4	s.h.
35:211	Intermediate Spanish I	4	s.h.
35:212	Intermediate Spanish II	4	s.h.
35:260	Advanced Spanish I	1-3	s.h.
35:261	Advanced Spanish II	1-3	s.h.
50:113	Exploring Music	3	s.h.
50:121	Music Theory I	4	s.h.
50:122	Music Theory II	4	s.h.
50:123	Music Theory III	4	s.h.
50:124	Music Theory IV	4	s.h.

50:150	Concert Chorus	1 s.h.
50:151	Voice Ensemble (NIACC Singers)	1 s.h.
50:152	Concert Band	1 s.h.
50:153	Orchestra	1 s.h.
50:154	NIACC Jazz Ensemble	1 s.h.
50:155	Chamber Ensemble	1 s.h.
50:156	Applied Music Vocal	1-2 s.h.
50:157	Applied Piano	1-2 s.h.
50:158	Applied Music Flute	1-2 s.h.
50:159	Applied Music Oboe	1-2 s.h.
50:160	Applied Music Clarinet	1-2 s.h.
50:161	Applied Music Bassoon	1-2 s.h.
50:162	Applied Music Saxophone	1-2 s.h.
50:163	Applied Music Trumpet	1-2 s.h.
50:164	Applied Music French Horn	1-2 s.h.
50:165	Applied Music Trombone	1-2 s.h.
50:166	Applied Music Euphonium	1-2 s.h.
50:167	Applied Music Tuba	1-2 s.h.
50:168	Applied Music Percussion	1-2 s.h.
50:169	Applied Music Drum Set	1-2 s.h.
50:170	Applied Music Guitar	1-2 s.h.
50:195	Beginning Piano	1 s.h.
80:140	American History to 1877	3 s.h.
80:141	American History 1877 to Present	3 s.h.
80:201	Western Civilization to 1648	4 s.h.
80:202	Western Civilization from 1648 to Present	4 s.h.
80:210	Introduction to Philosophy	3 s.h.
80:212	Ethics	3 s.h.
85:150	Introduction to Theater, TV, and Film	3 s.h.

NATURAL SCIENCES

40:121	Mathematics for Decision Making	3 s.h.
40:122	Mathematics for Elementary Teachers	3 s.h.
40:125	Quantitative Methods	3 s.h.
40:140	Intro to Statistics	3 s.h.
40:151	College Algebra and Trigonometry I	4 s.h.
40:152	College Algebra and Trigonometry II	4 s.h.
40:161	Precalculus	4 s.h.
40:240	Calculus for Business	3 s.h.
40:251	Analytic Geometry and Calculus I	4 s.h.
40:252	Analytic Geometry and Calculus II	4 s.h.
40:253	Analytic Geometry and Calculus III	4 s.h.
40:261	Differential Equations	3 s.h.
70:100	Introduction to Laboratory Science	2 s.h.
70:101	Biological Principles	3 s.h.
70:102L	Biological Principles Lab I	1 s.h.
70:104	Environmental Science	3 s.h.
70:105	Biology I	4 s.h.
70:108	Biology II	4 s.h.
70:109	Microbiology	4 s.h.
70:110	Health and Nutrition	3 s.h.
70:111	Human Biology	4 s.h.
70:114	Intro to Physical Science	4 s.h.
70:122	Principles of Physics	4 s.h.
70:135	General Chemistry I	5 s.h.
70:136	General Chemistry II	5 s.h.
70:137	Chemistry Principles I	5 s.h.
70:138	Chemistry Principles II	5 s.h.
70:140	Introductory Chemistry	4 s.h.

70:149	Kinesiology	3 s.h.
70:161	Genetics	4 s.h.
70:182	Astronomy	3 s.h.
70:200	Nutrition	3 s.h.
70:249	Urinalysis I	3 s.h.
70:250	Anatomy and Physiology I	4 s.h.
70:251	Anatomy and Physiology II	4 s.h.
70:260	Quantitative Analysis	4 s.h.
70:272	Fundamentals of Organic Chemistry	3 s.h.
70:273	Organic Chemistry	4 s.h.
70:274	Organic Chemistry I	5 s.h.
70:275	Organic Chemistry II	5 s.h.
70:280	General Physics I	4 s.h.
70:281	General Physics II	4 s.h.
70:282	College Physics I	5 s.h.
70:283	College Physics II	5 s.h.

SOCIAL SCIENCES

80:101	General Psychology	3 s.h.
80:103	Educational Psychology	3 s.h.
80:104	Child Psychology	3 s.h.
80:110	Sociology	3 s.h.
80:111	Social Problems	3 s.h.
80:112	Marriage and Family	3 s.h.
80:120	Intro to American Government	3 s.h.
80:121	American State & Local Govt	3 s.h.
80:122	International Relations	3 s.h.
80:133	Macroeconomics	3 s.h.
80:134	Microeconomics	3 s.h.
80:135	Personal Finance	3 s.h.
80:150	Introduction to Geography	3 s.h.
80:151	Regional Geography of the Developed World	3 s.h.
80:152	Regional Geography of the NonWestern World	3 s.h.
80:160	Cultural Anthropology	3 s.h.
80:230	Human Growth and Development	3 s.h.

BUSINESS

15:101	Intro to Business	3 s.h.
15:107	Keyboarding for Office Technology	3 s.h.
15:109	Introduction to Accounting	3 s.h.
15:110	Electronic Calculators	1 s.h.
15:112	Keyboarding Level I	1 s.h.
15:113	Keyboarding Level II	1 s.h.
15:114	Computer Literacy	1 s.h.
15:118	Accounting Procedures	3 s.h.
15:119	Accounting Applications	5 s.h.
15:120	Business Law I	3 s.h.
15:121	Business Law II	3 s.h.
15:122	Legal Office Procedures	5 s.h.
15:134	Computer Applications	3 s.h.
15:136	Advanced Document Processing	3 s.h.
15:140	Intro to Computers and Information Systems	3 s.h.
15:141	MIS I	3 s.h.
15:142	Principles of Management	3 s.h.
15:144	Principles of Supervision	3 s.h.
15:149	Managing Human Resources	3 s.h.
15:150	Accounting Principles I	3 s.h.
15:151	Accounting Principles II	3 s.h.

15:154	Personal Income Tax	4 s.h.	15:285	Multi-Layer Switching	5 s.h.
15:155	Payroll Accounting.....	3 s.h.	15:286	Network Support.....	5 s.h.
15:156	Networking I	4 s.h.	15:287	Emerging Remote Access Tech.....	3 s.h.
15:157	Networking II	4 s.h.	15:288	Network Design I.....	3 s.h.
15:158	Networking III	4 s.h.	15:289	Network Design II.....	4 s.h.
15:159	Networking IV.....	4 s.h.	15:290	Fundamentals of Project Management ..	4 s.h.
15:160	Computer Accounting.....	3 s.h.	15:299A	Special Problems in Business.....	1 s.h.
15:161	Operating Systems I.....	3 s.h.	15:299B	Special Problems in Business.....	2 s.h.
15:162	Novell Administration.....	4 s.h.	15:299C	Special Problems in Business	3 s.h.
15:163	Network Operating Systems.....	4 s.h.			
15:164	Groupware Applications I.....	4 s.h.	ELECTIVES		
15:165	Groupware Applications II.....	4 s.h.	10:210	Painting I	3 s.h.
15:166	Inter/Intranet Application Management ..	4 s.h.	10:211	Painting II	3 s.h.
15:167	Network Security	3 s.h.	20:101	Intro to Teaching	3 s.h.
15:168	Introduction to Programming	4 s.h.	20:110	Educational Measurement and Eval.....	2 s.h.
15:169	Media Experience.....	3 s.h.	20:120	Including Exceptional Students	3 s.h.
15:170	Principles of Banking.....	3 s.h.	20:195	Ed Media & Classroom Comp Tech	3 s.h.
15:171	Introduction to Entrepreneurship.....	3 s.h.	25:110	Orientation to Engineering.....	0 s.h.
15:172	Managing the Entrepreneurial Venture ..	3 s.h.	25:111	Engineering Problems with FORTRAN ..	3 s.h.
15:173	Seminar in Entrepreneurship.....	3 s.h.	25:112	Engineering Graphics and Design.....	3 s.h.
15:174	Data Base Management.....	3 s.h.	25:231	Statics of Engineering	3 s.h.
15:175	Electronic Spreadsheets	3 s.h.	25:241	Dynamics.....	3 s.h.
15:176	Advanced Desktop Applications.....	3 s.h.	25:251	Mechanics of Materials.....	3 s.h.
15:177	Operating Systems II.....	3 s.h.	30:113	LOGOS.....	1 s.h.
15:178	Hardware Service and Support	4 s.h.	30:120	College Reading Skills	3 s.h.
15:186	Internet Programming I.....	3 s.h.	30:205	Creative Writing.....	3 s.h.
15:187	Internet Programming II.....	3 s.h.	40:120	Intermediate Algebra	4 s.h.
15:188	Web Server Development	4 s.h.	50:120	Intro Music Theory.....	2 s.h.
15:190	General Insurance.....	3 s.h.	60:112	Scuba	1 s.h.
15:191	Introduction to E-Commerce	3 s.h.	60:113	Physical Fitness	1 s.h.
15:194	E-Commerce Cases	4 s.h.	60:114	Physical Fitness Lab	1 s.h.
15:195	Property/Casualty Insurance	3 s.h.	60:115	Games and Officiating I.....	2 s.h.
15:196	Structure and Design.....	3 s.h.	60:116	Games and Officiating II.....	2 s.h.
15:197	Internet Law.....	3 s.h.	60:117	Intro to Physical Education.....	2 s.h.
15:199	Web Application Development	3 s.h.	60:118	Care and Prevention of Athletic Injuries.....	2 s.h.
15:200	Life, Health & Disability Insurance.....	3 s.h.	60:120	Baseball (Intercollegiate).....	1 s.h.
15:201	Visual Communication.....	3 s.h.	60:121	Basketball (Intercollegiate).....	1 s.h.
15:202	Web Design.....	3 s.h.	60:122	Football (Intercollegiate).....	1 s.h.
15:203	Server Side Scripting.....	4 s.h.	60:123	Golf (Intercollegiate)	1 s.h.
15:204	Java.....	4 s.h.	60:127	Softball (Intercollegiate).....	1 s.h.
15:205	Financial Planning/Employee Benefits ..	3 s.h.	60:128	Volleyball (Intercollegiate)	1 s.h.
15:207	Real Estate Prelicense.....	3 s.h.	60:150	Theory, Ethics, and Professional Responsibilities of Coaching Interscholastic Athletics.....	1 s.h.
15:210	Business Statistics	3 s.h.	60:152	Intro to Anatomy and Physiology for Coaching	1 s.h.
15:211	Word Processing	2 s.h.	60:153	Human Development in Sports	1 s.h.
15:212	Business Communication.....	3 s.h.	60:175	Rape Education and Self Defense	2 s.h.
15:218	Professional Office Procedures	4 s.h.	60:232	First Aid and Personal Safety.....	1 s.h.
15:221	Marketing.....	3 s.h.	70:112	Animal Science.....	3 s.h.
15:222	Principles of Advertising	3 s.h.	80:125	Student Senate.....	1 s.h.
15:223	Principles of Selling	3 s.h.	80:114	Intro to Human Services.....	3 s.h.
15:230	Money and Banking.....	3 s.h.	80:144	American Indian History	3 s.h.
15:241	Human Relations	3 s.h.	80:190	Criminal Law I.....	3 s.h.
15:249	Medical Transcription I	3 s.h.	80:191	Criminal Law II.....	3 s.h.
15:250	Basic Medical Insurance & Coding.....	2 s.h.	80:192	Patrol Procedures.....	3 s.h.
15:251	Medical Terminology I	3 s.h.	80:290	Criminal Evidence	3 s.h.
15:252	Medical Terminology II	3 s.h.	80:291	Administration of Justice	3 s.h.
15:256	Medical Transcription II	3 s.h.	80:292	Criminal Investigation	3 s.h.
15:259	Medical Office Procedures	3 s.h.	85:160	Stagecraft.....	3 s.h.
15:265	Medical Transcription III	3 s.h.			
15:277	Network Routing.....	5 s.h.			
15:278	Network Remote Access	5 s.h.			
15:280	On-the-Job Training	3 s.h.			

85:170	Intro to Acting	3 s.h.
89:100	Cooperative Work Experience	1-5 s.h.
89:120	Individualized Educational Planning and Assessment.....	1 s.h.
89:150	Employment Strategies	1 s.h.
89:151	Academic Success Seminar.....	2 s.h.
89:152	Career Decision Making	2 s.h.
89:153	ACE-Action for College Education	1 s.h.
89:155	Financial Management/Insurance Internship.....	3 s.h.
89:163	Professions in Health	2 s.h.
89:164	Nurse Aide Theory	2 s.h.
89:165	Nurse Aide Clinical.....	1 s.h.
89:166	Nurse Aide II.....	3 s.h.
89:170	First Responder.....	2 s.h.
89:171	Emergency Medical Technician Paramedic Part I.....	6 s.h.
89:172	Emergency Medical Technician Paramedic Part II.....	7 s.h.
89:173	Emergency Medical Technician Paramedic Part III.....	3 s.h.
89:174	Emergency Medical Technician Paramedic Part IV	3 s.h.
89:175	EMT-I.....	4 s.h.
89:195	Emergency Medical Technician Basic Part I.....	4 s.h.
89:196	Emergency Medical Technician Basic Part II.....	2 s.h.

All special problems courses, unless otherwise indicated, are elective courses.

Quotable Quote:

When I was younger, I could remember anything whether it had happened or not.

-Mark Twain

COURSE DESCRIPTIONS—COLLEGE TRANSFER PROGRAMS**Categories:**

10.....	Art
15.....	Business
20.....	Education
25.....	Engineering
30.....	English
35.....	Foreign Languages
40.....	Math
50.....	Music
60.....	Physical Education
70.....	Natural Sciences
80.....	Social Sciences
85.....	Speech & Theatre
89.....	Experiential Learning, Electives, EMT, Nurse Aide, Study Abroad, and Enrich Program

* **Special Problems credit cannot be used to fulfill general education core requirements of degree.**

The pair of numbers in parentheses at the end of each course description refers to lecture hours and lab hours respectively. All courses are graded on a quality point basis unless designated as pass/no pass.

10 Art

10:100 Encounters in Humanities (2 s.h.) This course is designed to introduce students to the world of humanities; describe the humanities genres and disciplines; provide a systematic method of assessing humanities artifacts; present opportunities to assess humanities artifacts; define methods of participating in the humanities. Four humanities genres are represented with their respective disciplines. (15-30)

10:101 Essentials of Art (3 s.h.) An introductory course designed to give a better understanding of art as an important force in present-day living. Aims to develop an appreciation of art and creative thinking through lectures, readings, and visual aids. Experimentation with a variety of tools, techniques, and materials is a meaningful part of the course. Recommended for nonart majors. Entry-level course. (45-0)

10:102 Art History I (3 s.h.) The study of the development of the visual arts of western civilization including painting, sculpture, architecture, and crafts from prehistoric origins through Gothic. (45-0)

10:103 Art History II (3 s.h.) The study of the development of the visual arts of western civilization including painting, sculpture, architecture, crafts, and photography from the Renaissance through the twentieth century. (45-0)

10:112 Art in the Elementary School (3 s.h.) Prerequisite: 10:101, Essentials of Art, or permission of instructor to remove prerequisite. Recommended for elementary education majors. Artistic development of children, art instructional planning, art studio and response activities, field observations, and a "hands-on" teaching experience are incorporated, as well as multicultural and interdisciplinary approaches and art for children with special needs. (45-0)

10:120 Drawing (3 s.h.) The development of visual perception in objective and subjective representation. Study of line, form, texture, and value in a variety of media stressing an individual's creative development. Entry-level course. (20-50)

10:130 Ceramics (3 s.h.) Prerequisite: 10:201, Two-Dimensional Design; 10:120, Drawing; or 10:101, Essentials of Art. An introductory course involving hand-building, wheel-throwing, glazing, and firing. Slides, lectures, and demonstrations. Ceramics facilities are located in the MacNider Museum, Mason City. (20-50)

10:150 Creative Photography (3 s.h.) An investigation into the relationship of basic photographic techniques to design, perception, and aesthetics. Each student is encour-

aged to cultivate his or her own visual vocabulary while working on photographic projects. (20-50)

10:151 Intermediate Photography (3 s.h.) Prerequisite: 10:150, Creative Photography. Emphasis on exploring photographic materials in the development of a personal vision. Technical subject covered: lighting, advanced printing, and camera techniques. Only offered spring semesters. (20-50)

10:201 Two-Dimensional Design (3 s.h.) Students/artists explore the process of visual problem solving through participation in class critiques of individual projects. Perception and structure: exploring visual order emphasizing two-dimensional concepts. (20-50)

10:202 Graphic Design (3 s.h.) Prerequisite: 10:201, Two-Dimensional Design. Creative problem solving through the exploration of aesthetic and technical aspects of graphic design using computer-aided design software. (20-50)

10:210 Painting I (3 s.h.) Prerequisite: 10:201, Two-Dimensional Design; 10:120, Drawing; or 10:101, Essentials of Art. Beginning course planned to familiarize the student with the basic materials and tools of painting, the elements of pictorial organization, and the individual's creative development. Each student is encouraged to cultivate his or her own visual vocabulary. (45-0)

10:211 Painting II (3 s.h.) Prerequisite/Corequisite: 10:210, Painting I. Continuation of 10:210. Independent research, reading, and personal exploration of media and techniques. (45-0)

10:220 Digital Illustration (3 s.h.) Prerequisite: 10:201, Two-Dimensional Design. Recommended: 10:150, Creative Photography, or 10:202, Graphic Design. Creation and manipulation of digital imagery is explored in the context of creative

expression. User interactivity, animation, full-color printing, and computer art theories are covered. The student completes visual projects with instructor guidance. (30-30)

10:299A Special Problems in Art (1 s.h.) A course designed jointly by the student and the instructor to investigate a problem in art. Disciplined, advanced art students can select an area for research. With the instructor's approval and the consent of the Division Chair and Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. It is recommended that all other art courses available be completed before taking Special Problems. Course can be repeated for credit. (15-0)

10:299B Special Problems in Art* (2 s.h.) Same as 10:299A. (30-0)

10:299C Special Problems in Art* (3 s.h.) Same as 10:299A. (45-0)

15 Business

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.) Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wpm (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, producing, and proofreading documents: memos, letters, envelopes, tables and reports. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in a business. (45-0)

15:110 Electronic Calculators (1 s.h.) A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30) [Also Open Entry/Open Exit]

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Open Entry/Open Exit

15:110 Electronic Calculators (1 s.h.) [Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. (0-30)

15:112 Keyboarding Level I (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. This course covers the development of keyboarding techniques using the touch method on the computer to learn/review the alphabetic keys. The keyboarding goal is a minimum rate of 20 words a minute with 3 or less errors. Students with little or no keyboarding skill would begin at this level. (0-30)

15:113 Keyboarding Level II (1 s.h.) [Open Entry/Open Exit] Prerequisite: Keyboarding Level I OR ability to keyboard at 20 words a minute. This course covers the development of the touch method on the computer keyboard to learn/review the alphabetic, numeric, and symbol keys. The keyboarding goal is a minimum rate of 30 words a minute with 3 or less errors. (0-30)

15:114 Computer Literacy (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. Introduction to basic computer hardware and software functions. Emphasis on using the computer as a tool to create personal and business documents. Introductory windows, word processing, spreadsheet, and presentation units give students an opportunity to view software capabilities and use some of the features. Students with little or no computer background are encouraged to take this course. (0-30)

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15:118 Accounting Procedures (3 s.h.) An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers,

the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:119 Accounting Applications (5 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles with a grade of "C" or above. A continuation of Accounting Procedures including voucher system, partnerships, and corporations. Includes completion of an accounting simulation project. (75-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:121 Business Law II (3 s.h.) Prerequisite: 15:120, Business Law I recommended. A continuation of 15:120. Agency, corporations, partnerships, bailments, real property, wills, trusts, insurance, bankruptcy, and government regulation of business. Some information on international law and liability of professionals. (45-0)

15:122 Legal Office Procedures (5 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a lawyer's office that includes topics covering general legal documents, personal and real property, business organizations and meetings, bankruptcies, wills and estates, civil cases, and family law. Includes using a word processor, developing transcription skills, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (60-30)

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. (30-30)

15:136 Advanced Document Processing (3 s.h.) Prerequisites: 15:134, Computer Applications, and 15:211, Word Processing. Students will learn intermediate to advanced functions of Microsoft Word including customizing templates, recording macros, creating on-screen forms, managing long documents, creating hyperlinks, and publishing on the World Wide Web. Upon completion of the course, the students may be prepared to take the MOUS (Microsoft Office User Specialist) expert exam for Microsoft Word 2000. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, data base management software, and presentation software. Students also are exposed to web use, file management, and simple web page development. (45-0)

15:141 Management Information Systems I (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or permission of the Instructor. The primary goal of MIS I is to prepare students to be productive participants in an information society. The course is designed to develop a broad understanding of business information systems, various ways to discern information from an information system, and look at ways to distribute this information. The student will also learn the basic principles and techniques for developing simple computer-based information systems for managerial decision support systems through an extensive group project component of the course. (45-0)

15:142 Principles of Management (3 s.h.) Prerequisite: 15:101, Introduction to Business, is recommended. Provides students with a general introductory management learning experience. Role of management in today's business environment; management's influence on employee productivity, employee sat-

isfaction and organizational effectiveness; major control devices of management. (45-0)

15:144 Principles of Supervision (3 s.h.) This course is designed for individuals who hold, or who will hold, supervisory positions. The course involves the study of the major managerial functions (planning, organizing, staffing, directing, and controlling) and is augmented by other pervasive areas of supervision such as communication, motivation, decision making, and human relations. (45-0)

15:149 Managing Human Resources (3 s.h.) Course describes the transition from personnel management to human resources management. The focus is on the systematic process of recruitment, selection, developing, and appraising employees. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:151 Accounting Principles II (3 s.h.) Prerequisite: 15:150, Accounting Principles I, or equivalent. Course covers Statement of Cash Flows, financial statement analysis, job order and process cost systems, cost behavior, budgeting, standard costing, differential analysis and product pricing, capital investment analysis, activity-based costing, and just-in-time manufacturing. Emphasis is on management's use of accounting information. (45-0)

15:154 Personal Income Tax (4 s.h.) Personal Income Tax is a course that is designed to provide the student with an in-depth study of the preparation of the individual income tax return. The course is designed to assist the student in

developing a broad understanding of the tax laws as they relate to the individual. The course content includes an examination of regulations pertaining to general tax return preparation and filing for an individual, the preparation of a variety of tax forms and schedules including the calculation of deductions and credits. Recent tax law changes are also examined. (66-0)

15:155 Payroll Accounting (3 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles I with a grade of "C" or above. A study of basic business taxes. Emphasis on payroll taxes including social security taxes, income taxes, and unemployment taxes; completion of quarterly and annual reports and a payroll simulation project. (45-0)

15:156 Networking I (4 s.h.) This course provides an overview of networking, including such topics as networking advantages, OSI layers, addressing and routing protocols, and LAN design, topologies, and cabling. (60-0)

15:157 Networking II (4 s.h.) Prerequisite: 15:156, Networking I. A continuation of Networking I. Provides overview of Ethernet, token ring, ATM, and FDDI; examines routing and addressing issues; studies router setup and configuration; examines LAN designing, testing, and switching; and studies TCP/IP protocol and addressing. (45-30)

15:158 Networking III (4 s.h.) Prerequisite: 15:157, Networking II. A continuation of Networking II. Addresses such topics as advanced router configurations, LAN switching, networking management, and advanced network design. (45-30)

15:159 Networking IV (4 s.h.) Prerequisite: 15:158, Networking III. A continuation of Networking III. Using primarily hands-on, project-based learning, this course includes advanced network design projects and advanced network management projects. (45-30)

15:160 Computer Accounting (3 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles I with a grade of "C" or above. Designed to provide students with realistic experience with automated accounting consisting of five systems: general ledger, accounts payable, accounts receivable, depreciation, and payroll. Students will find themselves as having taken an accounting position in a company already using a computerized accounting system. Students will be working in an individualized instruction environment. (45-0)

15:161 Operating Systems I (3 s.h.) This course introduces students to the use of such popular operating systems as Microsoft DOS, Windows 95, Windows 98, Windows NT Workstation, UNIX, and Apple Macintosh. This course also addresses operating system interface and controls; file system management; application management; and network client configuration. (30-30)

15:162 Novell Administration (4 s.h.) Prerequisite: 15:161, Introduction to Operating Systems. This course provides an overview of where networking operating systems fit into the network solution, including such topics as the components and features of a network operating system, major network operating systems, operating system setup and configuration, network client issues, WAN issues, and network operating system selection criteria. (45-30)

15:163 Network Operating Systems (4 s.h.) Prerequisite: 15:162, Network Operating Systems I. This course is a continuation of Network Operating Systems I that goes into greater detail on such topics as network operating system design and installation; basic, user, peripheral, and application configurations; security issues; workstation and client setup; system management; and WAN/LAN issues. (45-30)

15:164 Groupware Applications I (4 s.h.) This course provides an

introduction to such applications as electronic mail, shared calendars, document sharing, bulletin boards, voice and video conferencing, and applications within a networked environment. The course will also include an examination of groupware application features, groupware configuration and management, the relation of desktop applications to group products, a comparison of specific groupware products, and social issues related to groupware applications. (45-30)

15:165 Groupware Applications II (4 s.h.) Prerequisite: 15:164, Groupware Applications I. This course builds on the Groupware Applications I. The course covers such topics as the advantages and disadvantages of a groupware application, installation requirements, initial configuration, interfacing applications, advanced use of applications, and troubleshooting. (45-30)

15:166 Inter/Intranet Application Management (4 s.h.) Prerequisite: 15:162, Network Operating Systems I, and 15:161, Introduction to Operating Systems, or permission of the instructor. This course enables students to design, set up, configure, and manage such Inter/Intranet services as the World Wide Web, electronic mail, domain name service, file transfer protocol; to gain knowledge of such merging applications as streaming audio and video and Internet phone; and to gain insight into the management of these services. (45-30)

15:167 Network Security (3 s.h.) Prerequisite: 15:156, Networking I, and 15:161, Introduction to Operating Systems, or permission of the instructor. This course will provide an overview of issues related to security in a networked environment, including such topics as security and disaster recovery, security within information services, security within an organization, virus protection, and Internet security/firewalls. (30-30)

15:168 Introduction to Programming (4 s.h.) This course provides students exposure to

computer program design, structure, development, and troubleshooting through an examination of such topics as logic concepts, variables, input/output, iterative constructs, conditional flow, modular design, and the comparison of programming languages. (45-30)

15:169 Media Experience (3 s.h.) Prerequisite: 15:140, Introduction to Computers. This course covers comprehensively the latest version of HTML. Students will learn good coding practices and be introduced to web development tools and FTP programs. Students will also be introduced to SSI (ServerSide Includes), CSS (Cascading Style Sheets), image management, browser helper applications, and basic JavaScript. (30-30)

15:170 Principles of Banking (3 s.h.) Fundamental bank functions presented in a descriptive fashion so that the beginning banker may view the chosen profession in broad (and operational) perspective. (45-0)

15:171 Introduction to Entrepreneurship (3 s.h.) Prerequisite: 15:101, Introduction to Business. The course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:172 Managing the Entrepreneurial Venture (3 s.h.) 15:101, Introduction to Business, or 15:171, Introduction to Entrepreneurship, are recommended. The course provides students with the tools necessary to manage and grow a small business. Students will examine the characteristics of successful small businesses and develop insight on developing strategies for successfully growing existing ventures. Students will also learn the process of evaluating the marketing and financial

needs of the venture and understand the components of a business plan. (45-0)

15:173 Seminar in Entrepreneurship (3 s.h.) Prerequisite: 15:171, Introduction to Entrepreneurship, and 15:172, Managing the Entrepreneurial Venture. Course will combine group discussions with an actual case project at a local entrepreneurial firm. Students will have an opportunity to apply business skills learned throughout their NIACC program as they complete a project for a local entrepreneurial venture. Students also will discover key entrepreneurial success characteristics. (38-15)

15:174 Data Base Management (4 s.h.) Prerequisite/Corequisite: 15:140, Introduction to Computers and Information Systems. The course consists of a study of data base theory and systems development. Actual use of data bases and development of simple information systems; making use of a popular relational data base will also be done. (45-30)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, data bases, and business graphics using appropriate software. (30-30)

15:176 Advanced Desktop Applications (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems. Advanced topics in desktop computer applications will be studied in this course. Students will also examine integrated software packages such as Microsoft Office Professional in this class. They will utilize integrated software to solve several business problems presented to them allowing them to gain an understanding of integrated software, as well as other desktop applications, through hands-on experience. The course will be project-based, providing the student with a collaborative environment. (30-15)

15:177 Operating Systems II (3 sh.) Prerequisite: 15:140, Introduction to Computers and Information Systems, and 15:161, Introduction to Operating Systems. This course is a continuation of Introduction to Operating Systems. Students will address advanced topics of operating systems such as Microsoft DOS, Windows 95, Windows 98, Windows NT Workstation, UNIX, and Apple Macintosh. Topics will include installation, troubleshooting, registry, batch files, configuration, network and Internet features, and utilities. (30-30)

15:178 Hardware Service and Support (4 sh.) Prerequisite: 15:140, Introduction to Computers and Information Systems, 15:161, Introduction to Operating Systems, or permission of instructor. This course prepares the student to properly install, configure, upgrade, troubleshoot and repair microcomputer hardware. This includes basic knowledge of desktop and portable systems, basic networking concepts, and printers. The student must also demonstrate knowledge of safety and common preventive maintenance procedures. Topics include advanced DOS and Windows concepts such as batch files and memory management, installing and uninstalling software, basic hardware installation, and troubleshooting. (30-60)

15:186 Internet Programming I (3 s.h.) Prerequisite: 15:169, Media Experience and 15:196, Structure and Design. This course will teach the fundamentals of client-side web scripting with JavaScript. Students will learn about browser-related object models and their associated properties, events, and methods. Students will work with these models to create documents on the fly, create pop-up documents, manage images, manage framesets, create roll-overs, enable and validate form elements, manage cookies, create and maintain basic databases, define and enable custom objects, and create various web-related tools. (30-30)

15:187 Internet Programming II (3 s.h.) Prerequisite: 15:186, Internet Programming I. This course will allow students to continue building their JavaScripting tools while learning how to program in PERL. Students will learn how to access server documents, create and manage databases, and build bulletin boards. A lot of time will be spent building solutions that require PERL, HTML, and JavaScript together. (30-30)

15:188 Web Server Development (4 s.h.) This course gives students a solid understanding of what is going on behind the scenes of a Web site and the Internet. Students will learn the concepts and components that make up Web servers along with the support of these Web servers. Topics such as planning, domains, configuration, testing, web protocols and services, recovery, security, log files, databases, indexing, CGI, ASP, JSP, clients, transactions, plug-ins, and SSL will be covered. The course will provide experience with popular web servers. (30-60)

15:190 General Insurance (3 sh.) Principles of insurance and risk, including personal and business viewpoints in regard to life, health, property, and liability risks. (45-0)

15:191 Introduction to E-Commerce (3 s.h.) Prerequisite: 15:140, Introduction to Computers. This course provides students with foundational skills and general information about electronic business solutions on the World Wide Web. Topics will include features of Internet marketing, sales, computer graphics, and network security. Students will also be introduced to Internet-related programming concepts and tools used to create web-based solutions. (30-30)

15:194 E-Commerce Cases (4 s.h.) Investigate current E-Commerce basics and real life scenarios regarding electronic business practices. This capstone course will tie together previous E-Commerce courses to real life applications. (30-60)

15:195 Property and Casualty Insurance (3 s.h.) Prerequisite/Corequisite: 15:190, General Insurance. This course is designed to provide instruction that will provide a high level of understanding of property and casualty insurance. Topics covered include fire, homeowners, dwelling, auto, business and professional liability, crime and fidelity, worker's compensation, and applications from a personal and commercial perspective. (45-0)

15:196 Structure and Design (3 s.h.) A fundamental requirement for people in the Information Technology field is the ability to organize a solution to a problem. This, in and of itself, is a difficult task. Often, however, this skill takes a backseat to learning code or is lost in the complexity of the task. Structure and Design concentrates on the process of developing a logical algorithmic solution to a problem. (45-0)

15:197 Internet Law (3 s.h.) Students will learn and examine legal issues associated with e-commerce, including but limited to, intellectual property protection, rights of privacy, content control, antitrust, and problems of jurisdiction. (45-0)

15:199 Web Application Development (3 s.h.) Prerequisite: 15:187, Internet Programming II. This course will build on the student's prior Internet Programming knowledge and give them an overview of various web application development resources, tools, languages, and technologies. Students will be introduced to various current tools and technologies available to a Web Developer for development and begin to understand the situations each works best in. Emphasis will be on compare and contrast techniques, proper planning, relating the syntax and elements to other tools and languages, knowledge transfer, how interaction takes place, design, and developing an understanding and use of programming resources. (30-30)

15:200 Life, Health, and Disability Insurance (3 s.h.) Prerequisite/Corequisite: 15:190, General

Insurance. This course is designed to provide instruction in a variety of areas giving the student a good understanding of life insurance, health insurance, and the role and application of both within the industry. (45-0)

15:201 Visual Communication (3 s.h.) This course is an introduction to visual problem solving and communication through the World Wide Web. This course will cover basic technical terminology, an overview of software and equipment for web graphic design and an introduction into digital imagery. Studio assignments will be digitized and sent electronically for evaluation and critique. The goal is to expand student competency in basic visual and technical skills, develop an understanding of how perception relates to communication, and expose students to current issues related to web graphic design. (30-30)

15:202 Web Design (3 s.h.) Prerequisite: 15:201, Visual Communications. This course is an expansion of graphic design concepts merging traditional page design, typography, and digital imagery into the concepts and practices of web design. This studio course will cover the preparation of digital images, compositional dynamics, and sequencing of images into a complete working web design. Students will work with current graphic and digital imaging software and web authoring software. (30-30)

15:203 Server Side Scripting (4 s.h.) Prerequisite: 15:187, Internet Programming II. In this course, students will learn to develop and implement web applications using server side scripting with emphasis on a single language. Additional server side scripting languages and technologies will be discussed. Much of the languages object model and methods will be covered with focus on how to work with these objects and procedures. Students will gain hands-on experience while writing real world-based web applications from the ground up. Database basics will also be learned along with SQL. Simple

databases will be created for use with web application back-ends. Students will learn to access and modify their databases by building front-ends for them using server side scripting and embedded SQL. A lot of time will be spent building solutions that require ASP, HTML, JavaScript, and various other server side scripting technologies together. (30-60)

15:204 Java (4 s.h.) Prerequisite: 15:203, Server Side Scripting. This course introduces students to doing purely object-oriented programming using the Java syntax. Emphasis is placed on using Java for web development. Students learn how to create their own objects and employ these objects as solutions to common real world-based web problems using applications and applets. Students will learn to create interactive elements and simple GUI elements. Use of the java.awt components, event-handling model, containers, and layout managers will also be emphasized. File handling techniques and multithreading will be presented, along with JavaBeans. Applications and applets will be built from button up to facilitate in deeper understanding of the concepts used in OOP. (30-60)

15:205 Financial Planning and Employee Benefits (3 s.h.) Prerequisite/Corequisite: 15:190, General Insurance. Instruction will be provided in estate planning, pension planning, annuities, personal and business needs, and other forms of securities. (45-0)

15:207 Real Estate Prelicense (3 s.h.) This pre-license course is required by the Iowa Real Estate Commission prior to examination for an Iowa Real Estate Salesperson License. Upon completion of this curriculum, participants will be exposed to principles of real estate, terminology, mathematical calculations, procedures and ethics necessary to enable them to understand the real estate profession. This course prepares them to take the Real Estate Salesperson Examination, and to function as a well informed real estate salesperson. (30-30)

15:210 Business Statistics (3 s.h.) Prerequisite: 40:125, Quantitative Methods; 40:140, Intro to Statistics; 40:161, Precalculus; or approval of instructor. The use of statistical methods as an analytical tool in business situations. Data collection, tabular and graphical presentations, frequency distributions, probability, sampling, data analysis, hypothesis testing and regression and correlation analysis. The use of a computer is incorporated into the course. (45-0)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters, interoffice memorandums, and informal business reports. A secondary emphasis will be placed on oral communication, listening skills, and nonverbal communication. (45-0)

15:218 Professional Office Procedures (4 s.h.) Prerequisite: 15:211, Word Processing; and 15:212, Business Communication. Office procedures and techniques necessary to perform general office duties. Includes using a word processor, developing transcription skills, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (45-30)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels

of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:222 Principles of Advertising (3 s.h.) Principles and practices in commonly used advertising media. (45-0)

15:223 Principles of Selling (3 s.h.) This course is centered around the study of concepts and practices used by professional salespeople in today's market-driven economy. The course also includes a study of selling as a promotional strategy used by marketers. (45-0)

15:230 Money and Banking (3 s.h.) Prerequisite: 80:133, Macroeconomics. An examination of money, banks, and financial markets and their effects on the U.S. economy in a global setting. The focus is on the nature and functions of money, the supply and demand for money, financial markets and interest rates, the Federal Reserve Banking System, bank safety and regulation, the money supply, and the level of national income and monetary policy. (45-0)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

15:249 Medical Transcription I (3 s.h.) This course is designed to simulate medical transcription practices used in a healthcare environment. The main objective is to provide the student with knowledge of the content and formats of medical documents and reports typically dictated in physicians' of-

fices, hospital clinics, and hospital ancillary and support facilities. (15-60)

15:250 Basic Medical Insurance and Coding (2 s.h.) Prerequisite: 15:251, Medical Terminology I and 94:104, Body Structure and Function. This course will provide the students with an overview of medical health insurance claims submission guidelines and basic coding procedures. In addition, the student will work through a number of relevant case studies. (30-0)

15:251 Medical Terminology I (3 s.h.) A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

15:252 Medical Terminology II (3 s.h.) Prerequisite: None. However, 15:251, Medical Terminology I is highly desirable. A continuation of 15:251. To be taken concurrently with 70:251, Anatomy & Physiology, by those in the Medical Secretary curriculum. A brief review of basic medical terminology followed by a systems approach to learning terms associated with the anatomical, physiological, and pathological aspects of the body. Classifications of associated pharmaceutical agents are studied with each related system. (45-0)

15:256 Medical Transcription II (3 s.h.) Prerequisite 15:249, Medical Transcription I. This course is designed to introduce students to hospital dictation. The students will progress through various levels of dictation including some advanced documents. (15-60)

15:259 Medical Office Procedures (3 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a medical office that includes preparing

correspondence and patient records, filing, handling telephone services, making and keeping appointments, developing transcription skills, composing letters, discussing professionalism, applying grammar rules, and taking care of general office duties. Also includes medical ethics and etiquette, medical law, and use of a computer for word processing. Students are expected to spend time outside of class working in the computer lab. (30-30)

15:265 Medical Transcription III (3 s.h.) Prerequisites: 15:249, Medical Transcription I. This course is designed to introduce students to live medical dictation from the clinical and radiology settings. The students will also be applying the issues of confidentiality and using medical reference books. (15-60)

15:277 Network Routing (5 s.h.) Prerequisite: 15:159, Networking IV. This course focuses on advanced routing using Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs) typically found at medium to large network sites. Upon completion of this training course, the student will be able to select and implement the appropriate Cisco IOS services required to build a scalable routed network. (45-60)

15:278 Network Remote Access (5 s.h.) Prerequisite: 15:277, Network Routing. Remote Access focuses on advanced WAN configurations, building remote access networks. The course teaches students how to build a remote access network to interconnect central sites to branch offices and home offices for telecommuters. The course further teaches students how to control access to the central site and how to maximize bandwidth utilization over the remote links. (45-60)

15:280 On-the-Job Training (1-6 s.h.) On-the-Job Training is designed to provide a student an opportunity to apply his/her skills in a job setting. The On-the-Job experience is coordinated with an identified school coordinator and

on-site sponsor. This is repeatable credit for a maximum of 6 hours. (0-180)

15:285 Multi-Layer Switching (5 s.h.) Prerequisite: 15:159, Networking IV, or CCNA certification. This course leads to the CCNP or CCDP. In this course, network administrators learn how to build campus networks using multilayer switching technologies over high speed Ethernet. This course includes both routing and switching concepts, covering both Layer 2 and Layer 3 technologies. (45-60)

15:286 Network Support (5 s.h.) This course leads to the CCNP. This course teaches students how to baseline and troubleshoot an environment using Cisco routers and switches for multi-protocol client hosts and servers connected with the following: Ethernet and Fast Ethernet LANS, Serial, Frame Relay, and ISDN BRI WANs. The course provides students with methodical practice using specific Cisco IOS software and Catalyst software tools to diagnose and correct problems on widely installed Cisco Products. (45-60)

15:287 Emerging Remote Access Technologies (3 s.h.) Introduces end-to-end Digital Subscriber Line (DSL) and cable modem technologies with focus on hands-on lab training for technicians on installing, configuring and troubleshooting DSL CPE equipment and infrastructure in a small business environment. Also touches upon Wireless and other emerging technologies communications. (30-30)

15:288 Network Design I (3 s.h.) This course leads to the CCDA certification. The CCDA certification (Cisco Certified Design Associate) indicates a foundation or apprentice knowledge of network design for the small office/home office (SOHO) market. CCDA certified professionals can design routed and switched networks involving LAN, WAN, and dial access services for businesses and organizations with networks of fewer than 100 nodes. (45-0)

15:289 Network Design II (4 s.h.) This course leads to the CCDP certification. The CCDP certification (Cisco Certified Design Professional) indicates advanced or journeyman knowledge of network design. With a CCDP, a network professional can design routed and switched networks involving LAN, WAN, and dial access services for businesses and organizations with 100 to more than 500 nodes. (60-0)

15:290 Fundamentals of Project Management (4 s.h.) Prerequisites: 15:141, MIS I and 15:158, Networking III, or permission of the Instructor. Fundamentals of Project Management defines a project and the role of projects in business. Students identify and demonstrate the basic knowledge areas of Project Management and the Project Management Framework. These knowledge areas focus on managing project components including: Integration, Scope, Time (scheduling), Cost, Quality, Human Resource, Communications, Risk, and Procurement. Fundamentals of Project Management clarifies the relationship between Project Management and other management disciplines including general management knowledge and practice, and application-area knowledge and practice. Students learn to apply the breakdown of project phases and processes and construct project plans that employ project phasing and knowledge areas. Students also learn to identify the aspects of project-based organizational systems and classify business organizations by type and project characteristics. Critical Path Method (CPM) project scheduling is learned and utilized to coordinate project planning, execution and analysis throughout a project life cycle. (45-30)

15:299A Special Problems in Business* (1 s.h.) Students may submit a proposal for a special project to the instructor. With the instructor's approval and the consent of the Division Chair and Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project.

Course can be repeated for credit. (15-0)

15:299B Special Problems in Business* (2 s.h.) Same as 15:299A. (30-0)

15:299C Special Problems in Business* (3 s.h.) Same as 15:299A. (45-0)

20 Education

20:101 Introduction to Teaching (3 s.h.) An introductory course in teacher education. The place of the school in the community, the basic philosophy, the organization and administration, and the nature of the curriculum. Purposeful observations provide practical experience. (30-15)

20:110 Educational Measurement and Evaluation (2 s.h.) Prerequisite: 20:101, Intro to Teaching 80:103, Educational Psychology; and 80:230, Human Growth and Development. This introductory course in educational measurement and evaluation will provide a survey of the following topics: assessment instrument, test preparation, and use of standardized measures. (30-0)

20:120 Including Exceptional Students (3 s.h.) Prerequisite: 20:110, Educational Measurement and Evaluation; and 80:230, Human Growth and Development. An introductory discussion of issues and practices regarding the inclusion of diverse student populations in general education settings. Topics include integration, mainstreaming, and inclusion. Emphasis is placed on addressing the needs of all students, i.e. general education, special education, gifted, at risk, and multicultural. Formal and informal projects explore adaptive strategies for the curriculum, classroom, and social skill development. (45-0)

20:195 Educational Media and Classroom Computing Techniques (3 s.h.) The production and use of instructional media/computer technology and their

relationship to educational strategies. (30-30)

25 Engineering

25:110 Orientation to Engineering (0 s.h.) Designed to help freshmen better understand engineering and assist them in choosing their area of specialization. Presentations by guest engineers from industry who discuss their areas of the profession. Four field trips to a selected engineering department of North Iowa industrial firms. (Class meets one hour per week.) This course has been designated as a pass/no pass course. (10-8)

25:111 Engineering Problems with FORTRAN (3 s.h.) Corequisite: 40:151, College Algebra and Trigonometry I; or 40:161, Precalculus. Development of skills, standards, and orderly methods of solving engineering problems. SI and English measurement and unit conversion. Estimation and calculation with approximate numbers. Significant figures. Graphing and curve-fitting of technical data. Using logarithmic and trigonometric functions. Introduction to engineering economics and statistics. Solution of engineering problems using the FORTRAN language. (30-30)

25:112 Engineering Graphics and Design (3 s.h.) Prerequisite: 25:111, Engineering Problems with FORTRAN, with a grade of "C" or higher, or consent of instructor. The integration of fundamental engineering graphics, computer-aided design (CAD), and engineering design. The use and manipulation of drawing instruments; freehand lettering and sketching; machine and CAD drawing of orthographic views and isometric pictorials; and basic dimensioning. Techniques for visualizing, analyzing and communicating 3-D geometries. Application through creative design projects with written and oral reports. (15-75)

25:231 Statics of Engineering (3 s.h.) Prerequisite: 40:251 Ana-

lytic Geometry and Calculus I, with a grade of "C" or higher. Corequisite: 40:252 Analytic Geometry and Calculus II, and 70:282 College Physics I. Scalar and vector quantities, forces, moments of forces, couples, and force systems; equilibrium, centroids and centers of gravity; analysis of structures; internal forces, shear and bending moments; friction; moments of inertia of areas. (45-0)

25:241 Dynamics (3 s.h.) Prerequisite: 40:253, Analytic Geometry and Calculus III and 25:231, Statics of Engineering. Particle and rigid body kinematics, Newton's laws of motion, kinetics of plane motion, rigid body problems using work-energy, linear, and angular impulse-momentum principles, vibrations. (45-0)

25:251 Mechanics of Materials (3 s.h.) Prerequisite: 25:231, Statics of Engineering. Plan stress, plane strain, stress-strain relationships, and elements of material behavior. Application of stress and deformation analysis to members subject to centric, torsional, flexural, and combined loadings. Elementary considerations of theories of failure, buckling. (45-0)

30 English

30:090 Basic Writing (4 s.h.) A developmental writing course designed for students referred by orientation assessment or by instructors. Emphasis is on writing; students will learn strategies for recognizing and compensating for individual writing problems. Students complete the course by meeting the minimum entrance requirements for Communication Skills I. Credit earned will not satisfy the requirements for an Associate Degree and will not be used in calculating the cumulative grade point average for graduation. This course has been designated as a pass/no pass course. (60-0)

30:091 Developmental Writing (1 s.h.) Prerequisite: registration in 30:090, Basic Writing. Students will be allowed to register for Developmental Writing upon referral

from a Basic Writing instructor. This course has been designated as a pass/no pass course. (15-0)

30:095 Basic Reading (4 s.h.) A developmental reading course designed for students who test at less than a ninth grade reading ability on standardized tests. Emphasis is on practice in improving concentration, vocabulary, and methods of studying. Credit earned will not satisfy the requirements for an Associate Degree and will not be used in calculating the cumulative grade point average for graduation. This course has been designated as a pass/no pass course. (60-0)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:101C Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on lan-

guage. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102C Communication Skills II (3 s.h.) Prerequisite: 30:101C, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:110 Oral Interpretation of Literature (3 s.h.) Meets either Communications or Humanities requirement. Analyzing prose, poetry, and drama selections for their logical and emotional content, and learning platform techniques to present this material to an audience. (45-0)

30:111 Introduction to Poetry/Drama (3 s.h.) A study of selected works of poetry and drama as forms of literature. Discussion and writing emphasizing interpretation, critical analysis, and judgment/evaluation. (45-0)

30:112 Introduction to Short Story/Novel (3 s.h.) A study of selected works of fiction in the short story and novels as forms of literature. Discussion and writing emphasizing interpretation, critical analysis, and judgment/evaluation. (45-0)

30:113 LOGOS (1 s.h.) Students may contribute to the student news publication, LOGOS, for 1-4 credits during their enrollment at NIACC. Credit may be earned through practical experience in reporting, photography, advertising, and other production-oriented work. Staff members are required

to attend weekly staff meetings and meet a minimum number of contributions for a passing grade. (0-30)

30:120 College Reading Skills (3 s.h.) Designed to help students become more efficient and effective in reading college textbooks, required materials, career resources, and leisure articles and books. Course adapts to the style and needs of each individual to improve vocabulary, comprehension, rate, and study skills. (45-0)

30:121 Introduction to Journalism (3 s.h.) Introduction to Journalism is designed to help the student understand the role of the media in a democracy and how that role is accomplished. The student will also improve communication skills because the course stresses the fundamentals of news gathering, news writing, editing, and publication design. Students will have the opportunity to gain practical experience in news writing and interviewing. The course will stress print media. (45-0)

30:122 News Writing and Reporting (3 s.h.) Prerequisite: 30:121, Introduction to Journalism, and ability to type. News Writing and Reporting serves as a class designed to help the student improve his or her news gathering and reporting skills. Students will be expected to cover a regular news beat and write stories for publication in LOGOS, the student news publication. Students will be expected to conduct interviews and utilize the computer programs used by the paper. (45-0)

30:201 World Literature I (3 s.h.) Readings from the great books of the Western world. Prose, poetry, and drama from the Bible and classical times to mid-18th century. May be taken without World Literature 202. (45-0)

30:202 World Literature II (3 s.h.) Readings from the great books of Western, Oriental, and African literature. Prose and drama from mid-18th century to the present. May be taken without World Literature 201. (45-0)

30:203 Minority Literature: African American (3 s.h.) Prerequisite: 30:101, Communication Skills I. A study of the writings of major African Americans from pre-Civil War to contemporary times. Slave narratives, autobiographies, letters, short stories, poetry, and novels will be studied as works of literature. Discussion and writing will focus on the critical analysis of the works. (45-0)

30:204 Minority Literature: American Indian (3 s.h.) Prerequisite: Communication Skills I. A study of the writings of major American Indians from precontact with Europeans to contemporary times. Legends, autobiographies, letters, speeches, poetry, novels and short stories will be studied as works of literature. Discussion and writing will focus on the critical analysis of the works. (45-0)

30:205 Creative Writing (3 s.h.) Prerequisite: A strong interest in writing and a background in literature is stressed before enrolling. A practical workshop in writing and rewriting manuscripts in preparation to publications. Emphasis on articles and short stories; individual instruction in poetry, novel, plays, or children's books. (45-0)

30:210 Children's Literature (3 s.h.) A study of Children's Literature from its beginning to contemporary literature by genre. An emphasis on teaching literature in the classroom will be a major component of the course. Purposeful school visitations will provide practical experience. This course meets some education program requirements. (45-0)

30:299A Special Problems in Communications* (1 s.h.) Student may submit a proposal for special project. If instructor approves, and with the consent of the Division Chairperson and the Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeated for credit. (15-0)

30:299B Special Problems in Communications* (2 s.h.) Same as 30:299A. (30-0)

30:299C Special Problems in Communications* (3 s.h.) Same as 30:299A. (45-0)

35 Foreign Languages

35:110 Beginning Spanish I (4 s.h.) A basic multimedia program for the beginner. Acquaints student with pronunciation, elementary grammatical concepts, and basic vocabulary. Exposure to the language through text, workbook, accompanying tapes and cassettes, oral instruction, and classroom drill. Regular attendance mandatory for good results. (45-30)

35:111 Beginning Spanish II (4 s.h.) Prerequisite: Beginning Spanish I (35:110) or by pretest. Student continues study of basic grammatical structures, acquisition of working vocabulary, assimilation of skills in using this knowledge, and begins to achieve limited fluency within this framework. Regular attendance mandatory for good results. (45-30)

35:211 Intermediate Spanish I (4 s.h.) Prerequisite: 35:111, Beginning Spanish, or two years or more of high school Spanish. A comprehensive grammar review, composition, and conversation course. Reading for meaning and cultural exposure to Hispanic countries. Course designed to promote facility in speaking and understanding the spoken and written idiom. Regular attendance required. (45-30)

35:212 Intermediate Spanish II (4 s.h.) Prerequisite: 35:211, Intermediate Spanish I or consent of instructor. A continuation of 35:211. A comprehensive grammar review, composition, and conversation course. Greatest grammatical emphasis is on use of subjunctive mood. Continuation of reading for improved fluency and acquaintance with Hispanic literature and culture. Course designed to improve facility

in speaking and understanding spoken and written Spanish. Regular attendance required. (45-30)

35:260A Advanced Spanish I (1 s.h.) Prerequisite: 35:212, Intermediate Spanish II, or a minimum of four years of high school Spanish or by permission of instructor. An individualized program of study including listening comprehension, translation, composition, and conversation. Reading assignments include short stories by well-known authors but no in-depth study of literature. For students well-versed in grammar and with substantial vocabulary. (15-0)

35:260B Advanced Spanish I (2 s.h.) Same as 35:260A. (30-0)

35:260C Advanced Spanish I (3 s.h.) Same as 35:260A. (30-30)

35:261A Advanced Spanish II (1 s.h.) A continuation of 35:260C. (15-0)

35:261B Advanced Spanish II (2 s.h.) Same as 35:261A. (30-0)

35:261C Advanced Spanish II (3 s.h.) Same as 35:261A. (30-30)

35:299A Special Problems in Foreign Languages - Spanish* (1 s.h.) Student may submit a proposal for a special project. With the instructor's approval and the consent of the Division Chair and Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeated for credit. (15-0)

35:299B Special Problems in Foreign Languages - Spanish* (2 s.h.) Same as 35:299A. (30-0)

35:299C Special Problems in Foreign Languages - Spanish* (3 s.h.) Same as 35:299A. (45-0)

40 Mathematics

40:040 Basic Mathematics (4 s.h.)

Prerequisite: A score of 15 or higher on the Basic Mathematics Pretest. This is a basic mathematics course that will prepare students to compete in an entry-level math course and to use numbers effectively in other situations. Upon completion, students will be able to perform basic computational skills with whole numbers, fractions, decimals, percentages, and integers. 40:040 is a developmental course. Credit earned will not satisfy the requirements for an Associate degree and will not be used in calculating the cumulative grade point average for graduation. Students will be allowed to register in Basic Mathematics upon referral from the instructor and/or appropriate diagnosis. (60-0)

40:060 Beginning Algebra (4 s.h.)

Prerequisite: Basic arithmetic skills as shown by one of the following: 1) a score of 49-100 on the COMPASS Pre-Algebra Test, a score of 1-51 on the COMPASS Algebra Test or a score of 16 or higher on the ACT math test; 2) a passing grade of "C" or better in Basic Mathematics. This course is intended for students who have had no previous experience in algebra. Topics include: the real number system, linear and some quadratic equations, exponents, factoring, rational expressions, graphing, systems of equations, radicals, the quadratic formula, square root manipulation, and application of concepts. Credit earned will not satisfy the requirements for an Associate degree and will not be used in calculating the cumulative grade point average for graduation. (60-0)

40:120 Intermediate Algebra (4 s.h.)

Prerequisite: Basic algebra skills as shown by one of the following: 1) a score of 51 on COMPASS Algebra test or 20 on the ACT Math Test and one year of high school algebra with a "C" or higher, or 2) successful completion "C" or higher) of Beginning Algebra (40:060). This course should prepare the student for college algebra and trigonometry or other course work that requires the same level of sophistication.

Topics include properties of real numbers, linear and quadratic equations, graphs of linear and quadratic equations, systems of equations, polynomials and rational expressions, inequalities, integral and rational exponents, radicals, and complex numbers. This course may not be used to satisfy core requirements. (60-0)

40:121 Mathematics for Decision Making (3 s.h.)

Prerequisite: Basic Arithmetic and Algebra skills as shown by one of the following: 1. A score of 16 or higher on the ACT Math Test, or a score of 49 or higher on the Pre-Algebra part of the COMPASS Test AND a grade of "C" or better in 40:060, Beginning Algebra (at NIACC) or equivalent; 2. A score of 20 or higher on the ACT Math Test or 51-75 on the Algebra section of the COMPASS test. Mathematics for Decision Making provides a survey of mathematics topics that includes sets, logic, probability, statistics, sets of numbers, algebra, geometry, and consumer math. This course will fulfill 3 hours of Natural Sciences requirement for the A.A. Degree. (45-0)

40:122 Mathematics for Elementary Teachers (3 s.h.)

Prerequisite: General Mathematics and Algebra skills as shown by one of the following: 1. A grade of "C" or higher in 40:121, Math for Decision Making or 40:120, Intermediate Algebra; 2. A score of 20 or higher on the ACT Math Test or a score of 51 or higher on the Algebra part of the COMPASS test AND successful completion ("C" or higher) of Algebra I and Geometry in high school. The course is specifically designed for elementary education majors. Topics include problem-solving strategies, sets, numeration systems, algebra, geometry, logic, calculators and computers, elementary probability and statistics. These topics are presented with a focus on their developmental theory. (45-0)

40:125 Quantitative Methods (3 s.h.)

Prerequisite: Two years of high school algebra with a "C" or higher or 40:120, Intermediate Algebra, with a "C" or better. This course provides a

sampling of applied mathematics topics from various disciplines. Some topics covered include elementary functions, linear systems, matrices, linear programming, set theory, probability, and Markov chains. (45-0)

40:140 Introduction to Statistics (3 s.h.)

Prerequisite: Two years of high school algebra with a "C" or higher or 40:120, Intermediate Algebra, with a "C" or higher. This course is intended to introduce students to basic statistical concepts. It covers descriptive and inferential statistical methods, hypothesis testing on the mean and proportion, Chi-square test for independence, and linear regression. Students are also introduced to technology as it applies to introductory statistical methods. (45-0)

40:151 College Algebra and Trigonometry I (4 s.h.)

Prerequisite: Two years of high school algebra with a "C" or higher or 40:120, Intermediate Algebra, with a "C" or higher. This course is intended for students majoring in business, social science, biological sciences, liberal arts, and those mathematics students with insufficient background to begin the study of calculus. The course studies a number of functions in detail, including their graphs and equations, inequalities, and applications based on the functions. These functions include linear, quadratic, and other polynomial functions, rational, root, and inverse functions, exponential and logarithmic functions, and the trigonometric functions. (60-0)

40:152 College Algebra and Trigonometry II (4 s.h.)

Prerequisite: 40:151, College Algebra & Trigonometry I with a "C" or higher. This course is a continuation of 40:151. Topics include the further study of trigonometric functions including their applications and inverses, study of vectors, complex numbers, DeMoivre's Theorem, systems of equations and inequalities, matrices, conic sections, parametric and polar equations, probability, sequences and series, and the Binomial Theorem. (60-0)

40:161 Precalculus (4 s.h.) Prerequisite: Two years of high school algebra with a "C" or higher and one year of geometry with a "C" or higher. This course is intended to provide students with a summary of mathematics topics needed to study analytic geometry and calculus. The functional approach is emphasized. Topics covered include fundamentals of algebra, polynomial, rational, exponential, logarithmic, and trigonometric functions, analytic trigonometry, systems of equations, analytic geometry of conics, sequences, and series. (60-0)

40:240 Calculus for Business (3 s.h.) Prerequisite: 40:161, Precalculus, with a grade of "C" or better, or equivalent. This course uses calculus techniques with an emphasis on applications to business, the social sciences, and the life sciences. Types of functions included in the course are polynomial, rational and root, exponential and logarithmic, and trigonometric. Topics include derivatives and their uses, and integrals and their applications. A graphing calculator is required. (45-0)

40:251 Analytic Geometry and Calculus I (4 s.h.) Prerequisite: Precalculus (40:161) with a "C" or higher, or both semesters of College Algebra and Trigonometry (40:151 and 40:152) with a "C" or higher, or two years of high school algebra with a "C" or higher and one year of high school geometry with a "C" or higher and at least one semester of precalculus or trigonometry with a "C" or higher. Topics include analysis of functions, limits, derivatives and integrals of algebraic, logarithmic, exponential, and trigonometric functions, and applications of differentiation. (60-0)

40:252 Analytic Geometry and Calculus II (4 s.h.) Prerequisite: 40:251, Analytic Geometry & Calculus I. This course is a continuation of 40:251. Topics include applications of the definite integral; principles of integration evaluation; improper integrals; modeling with differential equations; and infinite sequences and series. The availability of a graphing calculator is highly recommended. (60-0)

40:253 Analytic Geometry and Calculus III (4 s.h.) Prerequisite: 40:252, Analytic Geometry & Calculus II. This course is a continuation of 40:252. Topics include graphs and analysis of the conic sections, polar coordinates and parametric equations, three dimensional space, vectors and vector-valued functions, partial derivatives, multiple integrals, topics in vector calculus. (60-0)

40:261 Differential Equations (3 s.h.) Prerequisite: 40:252, Analytic Geometry and Calculus II. Topics include analytic methods for solving first and second order ordinary differential equations, higher order linear differential equations (including Laplace Transforms) and systems of differential equations, numerical methods for approximating solutions of differential equations, and applications using differential equations. (45-0)

40:299A Special Problems in Mathematics* (1 s.h.) Students may submit a proposal for a special project to an instructor. With the instructor's approval and the consent of the Division Chair and the Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeated for credit. (15-0)

40:299B Special Problems in Mathematics* (2 s.h.) Same as 40:299A. (30-0)

40:299C Special Problems in Mathematics* (3 s.h.) Same as 40:299A. (45-0)

50 Music

50:113 Exploring Music (3 s.h.) 50:113, Exploring Music is concerned with the development of Western Classical music from 400 BC to the present. Encompassing nearly 2500 years, the course provides the student with knowledge of six historical eras through a variety of media such as lectures, recordings, live performance, and computer-enhanced instruction. (45-0)

50:120 Introduction to Music Theory (2 s.h.) Prerequisite: previous instrumental or vocal music experience. Introduction to Music Theory is designed as a precourse to any Music Theory sequence. The course work will emphasize the circle of fifths, major scales, all forms of the minor scales, parallel and relative scale relationships, and music vocabulary. This course will also introduce the aural skills of scale identification, rhythmic dictation, and interval identification. (22.5-15)

50:121 Music Theory I (4 s.h.) Prerequisite: Previous instrumental or vocal experience. Theory I examines all the basic materials of music which include notation, scales, intervals, chords, melody, harmony, rhythm, and texture. Other areas of analysis take in cadence types, chord inversions, figured bass harmonization, and principles of part writing based on eighteenth century models. This course introduces fundamentals of the aural skills, sight singing, and dictation. (45-30)

50:122 Music Theory II (4 s.h.) Prerequisite: Final grade of "C" or better in 50:121, Music Theory I, or instructor consent. A continuation of 50:121, Music Theory II will examine in more detail the harmonic element of music. Discussions will include the harmonic progression, modulation and specific types of seventh chords as they relate to eighteenth century counterpoint. Further development of aural skills and the introduction of basic keyboard skills are included in the course work. (45-30)

50:123 Music Theory III (4 s.h.) Prerequisite: Final grade of "C" or better in 50:122, Music Theory II, or instructor consent. Through extensive music analysis and writing, students examine the contrapuntal writing style of the late Renaissance and Baroque periods and the simple formal structures perfected in the Classical period. Harmonic vocabulary is a continuation of Music Theory II and includes chromatic harmonies utilized during the common practice period. Continued development of aural and keyboard skills are also included in the course work. (45-30)

50:124 Music Theory IV (4 s.h.)

Prerequisite: Final grade of "C" or better in 50:123, Music Theory III, or instructor consent. A continuation of Music Theory III, Music Theory IV incorporates the techniques and materials of music utilized from the nineteenth century to the present. Through systematic analysis, the student discovers the definitions and characteristics of each of the significant compositional styles of the time. Advanced performance in aural and keyboard skills is required. (45-30)

50:150 Concert Chorus (1 s.h.)

Performs in concert on campus, for area high school assemblies, and community meetings. Participates in music festivals. Course may be repeated for credit. (45-90)

50:151 Voice Ensemble - NIACC Singers (1 s.h.) Vocal work in small ensembles. Performance before school, civic, and community groups. Membership by audition only. Course may be repeated for credit. (0-60)

50:152 Concert Band (1 s.h.) The North Iowa Concert Band, sponsored by North Iowa Area Community College, rehearses one night each week in preparation for concerts and programs. Open to all interested NIACC students and adults in the North Iowa area. Course is repeatable for credit to a maximum of 4 credit hours. (20-0)

50:153 Orchestra (1 s.h.) The North Iowa Symphony Orchestra, sponsored by North Iowa Area Community College rehearses one night each week in preparation for concerts and programs. Open to all interested NIACC students and adults in the North Iowa area. Some sections of the orchestra require an audition. Course is repeatable for credit to a maximum of 4 credit hours. (20-0)

50:154 NIACC Jazz Ensemble (1 s.h.) The NIACC Jazz Ensemble rehearses two and a half hours each week in preparation for concerts on campus, for area high school assemblies, festivals, and community events. Concentration on jazz rep-

ertoire from 1930 to the present. Open to all interested NIACC students by audition. Course is repeatable for credit to a maximum of 4 credit hours. (30-0)

50:155 Chamber Ensemble (1 s.h.) Course is designed to provide an opportunity to study and perform chamber literature of the last three centuries. Groups may vary in size from duets to sextets for brass, woodwind, string, or percussion instrumentalists. Also includes jazz combos. Time arranged. Course is repeatable for credit to a maximum of 4 credit hours. (15-0)

Applied Music (1-2 s.h.) Prerequisite for 50:157, Piano: 1 credit hour of 50:195 or equivalent. Individualized instruction in vocal or instrumental performance through the development of strong technical foundation and well-rounded musicianship. Instructional materials include a repertoire of traditional and contemporary literature. Students may register for 1 credit hour (30-minute lesson per week) or 2 credit hours (60-minute lesson per week) each semester. Each course is repeatable for credit to a maximum of 8. Must have instructor consent for 2 credit hours. (7.5-15) or (15-30)

Applied Music courses include:

50:156 Voice
50:157 Piano
50:158 Flute
50:159 Oboe
50:160 Clarinet
50:161 Bassoon
50:162 Saxophone
50:163 Trumpet
50:164 French Horn
50:165 Trombone
50:166 Euphonium
50:167 Tuba
50:168 Percussion
50:169 Drum Set
50:170 Guitar

50:195 Beginning Piano (1 s.h.) One 30-minute lesson per week to be arranged. Designed for students who are beginners. Basic piano literature used. May be repeated for credit. (8-14)

50:299A Special Problems in Music* (1 s.h.) Students may submit a proposal for a special project to an instructor. With the instructor's approval and the consent of the Division Chair and the Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeated for credit. (15-0)

50:299B Special Problems in Music* (2 s.h.) Same as 50:299A. (30-0)

50:299C Special Problems in Music* (3 s.h.) Same as 50:299A. (45-0)

60 Physical Education

60:112 Scuba Diving (1 s.h.) Development of skills, knowledge, and safety leading to international certification in sport diving. Will involve additional fees for equipment rental, book, certification, pool rent, and purchase of specialized scuba gear. (15-0)

60:113 Physical Fitness (1 s.h.) A lecture course designed to teach the student about the importance of being physically fit. The course material will provide insight into various methods of testing physical fitness as well as identifying what good physical fitness is. The student will be able to assess his/her own level of physical fitness. (15-0)

60:114 Physical Fitness Lab (1 s.h.) A lab course designed to increase a person's interest of his/her own level of physical fitness. The course provides activities with which the student can improve his/her level of physical fitness in the areas of strength, flexibility, and endurance. The student will be required to participate in class activities twice a week. (0-30)

60:115 Games and Officiating I (2 s.h.) Guiding principles and standards: rules, mechanics, and procedures for competitive sports

officiating. Students will work toward becoming a registered official in the Iowa Athletic Associations. Emphasis will be on football officiating, volleyball officiating, and boys' and girls' basketball officiating. Each student will gain actual officiating experience. (28-4)

60:116 Games and Officiating II (2 s.h.) Prerequisite: 60:115, Games and Officiating I. This course is a continuation of 60:115. Attention directed toward the study of wrestling, track, baseball, and softball. (28-4)

60:117 Introduction to Physical Education (Co-ed) (2 s.h.) Designed to provide career information concerning opportunities in physical education, coaching, and recreational activities. (30-0)

60:118 Care and Prevention of Athletic Injuries (2 s.h.) Recommended: one semester course in anatomy and physiology. Introductory preparation in athletic training, injury, treatment techniques, taping, wrapping, etc. Preventative measures to reduce athletic injuries. Course may be used to fulfill partial requirement for Iowa Coaching Certification. (30-0)

60:120 Baseball (1 s.h.) Course may be repeated for credit. (40-160)

60:121 Basketball (1 s.h.) Course may be repeated for credit. (40-160)

60:122 Football (1 s.h.) Course may be repeated for credit. (40-160)

60:123 Golf (1 s.h.) Course may be repeated for credit. (10-60)

60:127 Softball (1 s.h.) Course may be repeated for credit. (40-160)

60:128 Volleyball (1 s.h.) Course may be repeated for credit. (40-100)

60:150 Theory, Ethics, and Professional Responsibilities of Coaching Interscholastic Athletics (1 s.h.) Guiding principles and techniques of coaching interscholastic athletics. Discussion of theory, ethics, and profes-

sional responsibilities as they relate to coaching interscholastic athletes. (20-0)

60:152 Introduction to Anatomy and Physiology for Coaching (1 s.h.) An introduction to anatomy and physiology with stress on the relationship to athletic actions. This course is designed as an introductory course for prospective coaches with little or no background in anatomy and physiology. (15-6)

60:153 Human Development in Sports (1 s.h.) A one-semester course with emphasis on human growth and development and relationship to physical activity, with special attention to children and adolescents. (15-0)

60:175 Rape Education and Self Defense (2 s.h.) Rape Education and Self Defense is a course of study designed to introduce the participant to basic self-defense concepts and techniques, to heighten the participant's level of awareness and alertness in her environment, to provide participant with information about violent contexts, and to provide the participant with basic physical methods of self-defense. In general, this course cannot offer absolutes; however, the theory behind such a course rests in the concept that those armed with information and a few operational options stand a better chance of avoiding and, when avoidance fails, surviving violence. (30-0)

60:232 First Aid and Personal Safety (1 s.h.) Lecture-type course designed to give the layperson adequate first aid knowledge and skills with emphasis on accident prevention and recognition and treatment of common medical emergencies. (15-0)

60:299A Special Problems in Physical Education* (1 s.h.) Students may submit a proposal for a special project to an instructor. With the instructor's approval and the consent of the Division Chair and the Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project.

Course may be repeatable for credit. (15-0)

60:299B Special Problems in Physical Education* (2 s.h.) Same as 60:299A. (30-0)

70 Natural Sciences

70:100 Intro to Lab Science (2 s.h.)

Prerequisite: 30:101, Communication Skills I; 80:110, Sociology OR 80:101, General Psychology; 70:140, Intro to Chemistry; 70:250, Anatomy and Physiology I. This course familiarizes the student with the Medical Laboratory Technician program and the field of laboratory medicine. The organization and role of the clinical laboratory are explored, as well as medical ethics and conduct, employment opportunities, and professional opportunities. (30-0)

70:101 Biological Principles (3 s.h.) Study of organismic biology including organization, metabolism, and reproduction of living systems. Includes evolutionary patterns, inheritance, growth, development, ecosystems, reproduction, and structure-function relationships among organisms. (45-0)

70:102L Biological Principles Laboratory (1 s.h.) Prerequisite: Credit for 70:101 or current enrollment in 70:101. Biological Principles Laboratory. (0-30)

70:104 Environmental Science (3 s.h.) The study of ecological principles and the interrelationships among populations, resources, and pollution in developing a sustainable society. Topics include: population, ecology, soil, water, land, air, and energy resources, plus air, water, soil, and waste management. Environmental decision-making strategies to resolve current and future environmental issues are stressed. (30-30)

70:105 Biology I (4 s.h.) Prerequisite/Corequisite: concurrent enrollment in 70:135, General Chemistry I, or 70:137, Chemistry Principles I, is strongly encouraged. Detailed study of the fundamental principles of biology. Includes study of cell structure and function, energy transfer, inheritance, evolution, and ecology. Course is intended for students majoring in biology or pursuing careers in the premedical or related fields which require an emphasis in biology. (45-30)

70:108 Biology II (4 s.h.) Prerequisite: 70:105, Biology I. The diversity of life. Characteristics, structures, and functions of the major groups of living organisms will be examined. (45-30)

70:109 Microbiology (4 s.h.) Morphology, physiology, taxonomy, and relationship of microorganisms to disease. In-depth laboratory study and suitable lecture material with applications to agriculture, industry, and medicine. (45-30)

70:110 Health and Nutrition (3 s.h.) The science of health and its application to the individual, home, community, and school. Elementary physiology, nutrition, dependency, and current health problems of national concern. (45-0)

70:111 Human Biology (4 s.h.) Course provides overview of human biology for nonscience majors. Includes study of cells, tissues, organs, and systems with emphasis on interrelatedness. Coverage also includes genetics, aging, human ecology, and aspects of various human diseases. (45-30)

70:112 Animal Science I (3 s.h.) This course is designed to provide a general overview of the livestock industry. The student will develop an understanding of and will be able to apply the basic principles of animal selection, breeding, genetics, feeding, health, and husbandry practices. Students will have the opportunity to practice husbandry skills at the NIACC Teaching Farm. (45-15)

70:114 Intro to Physical Science and Lab (4 s.h.) Prerequisite: High school Algebra or equivalent. An introductory college level, one-semester course intended to meet general education requirements. Topics are chosen from the fields of physics and chemistry. (45-30)

70:122 Principles of Physics (4 s.h.) Prerequisite: 40:120, Intermediate Algebra, or equivalent. An introductory level, one-term course. Major topics are measurement, matter in motion, heat, wave motion, electricity, and magnetism. (45-30)

70:135 General Chemistry I (5 s.h.) Prerequisite: 40:060, Beginning Algebra, or equivalent. Introduction to the basic concepts and facts of chemistry. Topics include atomic structure, formation of ionic and covalent compounds, molecular structure, chemical equations including mass relations, solutions, and gases. Intended for nonscience majors. (45-60)

70:136 General Chemistry II (5 s.h.) Prerequisite: 70:135, General Chemistry, or the equivalent. Continuation of 70:135, General Chemistry 70:135. Topics include types of chemical reactions and chemical reactivity, equilibrium concepts, reaction rates, electrochemical cells, introductions to organic chemistry and biochemistry. Intended for nonscience majors. (45-60)

70:137 Chemistry Principles I (5 s.h.) Prerequisite: satisfactory completion of one year of high school chemistry; 40:120, Intermediate Algebra, or the equivalent. Atomic structure, stoichiometry, thermochemistry, physical properties (gases, liquids, solids, and solutions), chemical bonding and molecular structure, structure-property relationships. (45-60)

70:138 Chemistry Principles II (5 s.h.) Prerequisite: 70:137, Chemistry Principles I, or equivalent. Chemical equilibrium and kinetics, acid-base chemistry, chemical thermodynamics, electrochemistry, descriptive chemistry of selected

elements, introduction to organic chemistry and polymers, nuclear reactions. (45-60)

70:140 Introductory Chemistry (4 s.h.) Prerequisite: 40:060, Beginning Algebra, or equivalent. A first-year college chemistry course which covers the concepts of chemistry. Among the topics included are systems of measurement, matter and energy, atomic theory, energy levels and atomic structure, the periodic table, ionic and covalent bonding, chemical equations, stoichiometry, acids and bases, states of matter, solutions, and redox. Lab experiments are performed and complement the classroom theory. (45-30)

70:149 Kinesiology (3 s.h.) Prerequisite: 70:250, Anatomy and Physiology I; and 70:251, Anatomy and Physiology II. Provides a basic understanding of normal human body movement as related to skeletal, articular, neurological, and muscular systems. Levers, torques, center of gravity, base of support, and their relationship to balance, posture, and movement will be addressed. The student will learn anatomical palpations and the basics of human gait. (30-30)

70:161 Genetics (4 s.h.) Prerequisite: One term of biology or consent of instructor. The course is an introduction to basic modern genetics. It includes: the nature of the genetic material and how it is transmitted between generations; gene regulation and interactions; human genetics; genetic engineering, and its implications. (45-30)

70:182 Astronomy (3 s.h.) An introductory level, one-semester course for the nonscience major. Topics include a brief history of astronomy, the physics behind astronomy, the solar system, stars, and galaxies. Hands-on activities complement material in the text. (45-0)

70:200 Nutrition (3 s.h.) Prerequisite: three credit hours of inorganic chemistry. Physiology very helpful, but not essential. Introduces the scope of the science of nutrition and

its application to the nurse's role in promoting good nutrition throughout the life span. Principles of diet modification are presented as they relate to specific health problems. Nursing assessment, the patient's nutritional needs, and dietary planning are included. (45-0)

70:249 Urinalysis I (3 s.h.) Prerequisite: 70:100, Intro to Lab Science. This course includes the study of urine formation and the methodology determining the physical, chemical, and microscopic properties of urine in normal and abnormal states. (30-30)

70:250 Anatomy and Physiology I (4 s.h.) Prerequisite: Human biology or biological principles highly recommended. A study of the human body emphasizing the complementary nature of structure and function, molecular and cellular interactions, homeostasis, and metabolic processes. A cat dissection constitutes a major portion of the laboratory exercises. Includes a study of cells, tissues, membranes, skeletal, muscular, and reproductive systems. (45-30)

70:251 Anatomy and Physiology II (4 s.h.) Prerequisite: Successful completion of 70:250, Anatomy and Physiology I, strongly recommended. A continuation of 70:250, Anatomy and Physiology I. Includes a study of the circulatory, respiratory, digestive, endocrine, urinary, and nervous systems. Cat dissections continued, plus kidney, brain, and eye dissections. (45-30)

70:260 Quantitative Analysis (4 s.h.) Prerequisite: 70:137 and 70:138, Chemistry Principles; or 70:135 and 70:136, General Chemistry. Theory and practice of general gravimetric, volumetric, and instrumental methods of chemical analysis; laboratory work involving quantitative reactions, measurements, and calculations. (45-30)

70:272 Fundamentals of Organic Chemistry (3 s.h.) Prerequisite: 70:135, General Chemistry; 70:137, Chemistry Principles I; or 70:140, Introductory Chemistry. A survey of

organic chemistry and biochemistry for students in nursing and related fields. Topics include organic reaction mechanisms; nomenclature chemistry of carbohydrates, lipids and proteins, and their metabolism; biochemical systems. (45-0)

70:273 Organic Chemistry (4 s.h.) Prerequisite: 70:140, Introductory Chemistry; 70:135, General Chemistry; or 70:137, Chemistry Principles I. This course provides instruction in the preparation and reactions of the basic classes of carbon compounds. Among these include hydrocarbons, alcohols, esters, carboxylic acids and their derivatives, aldehydes, ketones, amides, and amines. Laboratory procedures and techniques dealing with nonaqueous solvents are developed. (45-30)

70:274 Organic Chemistry I (5 s.h.) Prerequisite: 70:136, General Chemistry II, or 70:138, Chemistry Principles II. For students looking forward to work in medicine, pharmacy, dentistry, veterinary science, or chemical engineering, and for students intending to major in chemistry. (45-65)

70:275 Organic Chemistry II (5 s.h.) Prerequisite: 70:274, Organic Chemistry I. This course is a continuation of 70:274. The lecture and laboratory incorporates spectral use and applications. (45-65)

70:280 General Physics I (4 s.h.) Prerequisite: 40:151, College Algebra and Trigonometry, or equivalent. Mechanics, simple harmonic motion, waves, and fluids. Designed for students in pharmacy, medicine, dentistry, and professional fields other than engineering. Liberal arts students with an interest in science may elect this course. (45-30)

70:281 General Physics II (4 s.h.) Prerequisite: 40:151, College Algebra and Trigonometry or equivalent, and 70:280, General Physics I; or equivalent algebra-based first semester physics course as approved by the instructor. A continuation of 70:280, thermodynamics, electricity

and magnetism, DC and AC circuits, optics and atomic physics. (45-30)

70:282 College Physics I (5 s.h.) Prerequisite: Calculus concurrent or in background. Calculus-based Physics with emphasis on engineering applications. (60-30)

70:283 College Physics II (5 s.h.) Prerequisite: Calculus concurrent or in background. Calculus-based physics with emphasis on engineering applications. (60-30)

70:297A Special Problems in Biology* (1 s.h.) Students may submit a proposal for a special project to an instructor. With the instructor's approval and the consent of the Division Chair and the Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeatable for credit. (15-0)

70:297B Special Problems in Biology* (2 s.h.) Same as 70:297A. (30-0)

70:297C Special Problems in Biology* (3 s.h.) Same as 70:297A. (45-0)

70:298A Special Problems in Chemistry* (1 s.h.) Students may submit a proposal for a special project to an instructor. With the instructor's approval and the consent of the Division Chair and the Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeatable for credit. (15-0)

70:298B Special Problems in Chemistry* (2 s.h.) Same as 70:298A. (30-0)

70:298C Special Problems in Chemistry* (3 s.h.) Same as 70:298A. (45-0)

70:299A Special Problems in Physics* (1 s.h.) Students may submit a proposal for a special project to an instructor. With the instructor's approval and the consent of the Division Chair and the Vice President for Academic Affairs, credit may be

given upon satisfactory completion of the project. Course may be repeatable for credit. (15-0)

70:299B Special Problems in Physics* (2 s.h.) Same as 70:299A. (30-0)

70:299C Special Problems in Physics* (3 s.h.) Same as 70:299A. (45-0)

80 Social Sciences

Note: All courses in this category do not meet the Social Science distribution requirement. See pages 155-158 for courses which specifically meet this requirement.

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to coenroll in 30:120, College Reading Skills. Introduction to the scientific study of behavior: a brief history of psychology as a science; influences of heredity and environment; motivation, frustration and conflict; the learning process, intelligence, perception, and mental health. (45-0)

80:103 Educational Psychology (3 s.h.) Prerequisite: 20:101, Intro to Teaching, is highly recommended, but not required prior to taking Ed Psychology. Study of teaching and learning process. Mental hygiene, evaluation, individual differences, motivation, and teaching methods are introduced as they apply to the teaching and learning environment. (42-3)

80:104 Child Psychology (3 s.h.) Prerequisite: 80:101, General Psychology, and/or 80:230, Human Growth and Development. Course covers information relevant to the development of humans from the prenatal stages through adolescence. Topics covered include the developing fetus, as well as physical, social, and psychological development in infancy, toddlerhood, childhood, and adolescence. (45-0)

80:110 Sociology (3 s.h.) An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

80:111 Social Problems (3 s.h.) Prerequisite: 80:110, Sociology, is strongly recommended. Introduction to the study of contemporary social problems. The course examines how social problems are identified, explores underlying conditions and causes of social problems, and considers possible solutions and policy implications. Emphasis is on sociological and critical thinking frameworks. Topics of exploration include: mental illness, substance abuse, crime, prejudice and discrimination, prostitution, and poverty. (45-0)

80:112 Marriage and Family (3 s.h.) A survey of the family as a social unit in the modern American culture. A study is made regarding the creation of the American family from various cultures as well as the problems the family is subjected to such as sex relations, social roles, communication, finance, and divorce. (45-0)

80:114 Introduction to Human Services (3 s.h.) This course is designed to familiarize the student with the human services arena. Various employment opportunities are explored, as well as ethical, legal, political, and economic forces. (45-0)

80:120 Introduction to American Government (3 s.h.) A survey of the American federal system of government including a description and analysis of the Constitution, the legislative, executive, and judicial branches of government, and the American political process. (45-0)

80:121 American State and Local Government (3 s.h.) A survey of state and local governments in the United States including an analysis of federal-state relations, state constitutions, state and local legislative, executive, and judicial systems, and major issues in state and local politics. (45-0)

80:122 International Relations (3 s.h.) An introductory course in international relations which offers an analysis of the structure and processes of world politics. Topics covered include the study of foreign policies, a survey of major problems in contemporary world affairs, and an examination of selected global issues. (45-0)

80:125 Student Senate (1 s.h.) Students learn organizational and leadership skills through participation in the NIACC Student Senate, student and college committees, and student activity programming. Each student will identify and carry out a project to demonstrate leadership skills including needs assessment, planning, budgeting, motivating volunteers, and evaluation. Course may be repeatable for credit. (0-30)

80:133 Macroeconomics (3 s.h.) An introductory study of how people use scarce resources to satisfy their many material wants and needs. The emphasis is on the determination of national income, output, employment and prices, and the role of the money and banking system in a market economy. (45-0)

80:134 Microeconomics (3 s.h.) Prerequisite: 80:133, Macroeconomics. An introductory study of how people use scarce resources to satisfy their many material wants and needs. The emphasis is on the concept of scarcity, supply and demand, and decision making by individual consumers and businessmen in the product and resource markets. (45-0)

80:135 Personal Finance (3 s.h.) Introduction to financial planning, using financial services and your income wisely, protecting your assets, increasing your income through savings and investment, and planning for retirement. (45-0)

80:140 American History to 1877 (3 s.h.) A survey course covering the social, political, and economic history of American civilization from the Age of Discovery through Reconstruction. (45-0)

80:141 American History 1877 to Present (3 s.h.) A survey course covering the social, political, and economic history of the United States since 1877. (45-0)

80:144 American Indian History: Prehistory to Mid-20th Century (3 s.h.) Ethnographic, geographic, and historical survey of the social, cultural, and political systems developed by American Indians north of Mexico. Points of emphasis include native religion and world view, family life, agricultural and hunting practices, material culture, trade and diplomacy, political structures, and the mutualities impact on societies and policies resulting from contact and interaction with Europe and the United States. (45-0)

80:150 Introduction to Physical Geography (3 s.h.) An introductory systems course in geography that acquaints the student with spatial relationships that exist in the physical environment. Topics include: geographic tools, weather and climate, land forms, soils, water resources, plants, and animals. Lab experience included. (45-8)

80:151 Regional Geography of the Developed World (3 s.h.) A regional study of the physical and cultural spatial patterns of Europe, Australia, Russia, and Anglo-American. (45-0)

80:152 Regional Geography of the NonWestern World (3 s.h.) A regional study of the physical and cultural spatial patterns of Middle America, South America, North Af-

rica/Southwest Asia, South Asia, East Asia, Southeast Asia and the Pacific World. (45-0)

80:160 Cultural Anthropology (3 s.h.) Prerequisite: Three of the following: Sociology, Psychology, Marriage and Family, Biology, Literature, or Genetics. This course embraces cultures from all continents; highlights major human subsistence patterns; and illustrates human adaptation to the environment, from the beginning of human history to the present. Individual studies enable students to experience cultures in-depth. The student's goal is to understand one's own culture from a historical perspective and to analyze the forces of today in terms of how those forces may affect the future of earth and mankind. (26-38)

80:190 Criminal Law I (3 s.h.) The philosophy and basis for law; the historical development of criminal law and procedures; the structure, definitions, and criminal laws of Iowa. Required course for Law Enforcement curriculum. (45-0)

80:191 Criminal Law II (3 s.h.) Required course for Law Enforcement curriculum. Covers the law of arrest, search, and seizure. A continuation of 80:190. (45-0)

80:192 Patrol Procedures (3 s.h.) Responsibilities, techniques, and methods of police patrol. Methods of traffic law enforcement, regulation and control; and fundamentals of traffic accident investigations. (45-0)

80:201 Western Civilization to 1648 (4 s.h.) A study of the major social, political, economic, cultural, and philosophical movements in the Western World from the beginning of civilization to 1648. (60-0)

80:202 Western Civilization 1648 to the Present (4 s.h.) A study of the major social, political, economic, and philosophical movements in the Western World from 1648 to the present. (60-0)

80:210 Introduction to Philosophy (3 s.h.) Introduces the student to the study of philosophy and teaches skills of critical thinking. The course examines the meaning and value of philosophy; human nature and the self; axiology -- ethics and values (in search of the good life); social philosophy; freedom; individualism; philosophy and art; epistemology -- the nature of knowledge; truth; philosophy and science; metaphysics -- reality; philosophy and religion; the meaning of suffering and death; examination of decision making and self-discovery. (45-0)

80:212 Ethics (3 s.h.) This course is designed to develop objective thinking skills. The goal is to create a balance between moral principles when considering a variety of ethical issues. The emphasis will be on developing a moral stance that is workable in today's society. Issues include poverty, environment, animal rights, business, ethics, preferences in hiring, war, death penalty, abortion, euthanasia, parent-child relationships, sex, love, and marriage. (45-0)

80:230 Human Growth and Development (3 s.h.) A study of the physical, mental, emotional, and social growth of the person from infancy through adulthood. Discussions include the need for love, affection, and attention; the concept of ego and sense of identity; the need of human bonds; the value of interpersonal dialogue; the capacity to develop intelligence; and the socioeconomic/ethnic influences. (45-0)

80:290 Criminal Evidence (3 s.h.) The kinds and degrees of evidence and the rules governing the admissibility of evidence in court. Required course for Law Enforcement curriculum. (45-0)

80:291 Administration of Justice (3 s.h.) Arrest, search and seizure; review of court systems; procedures from incident to final disposition; principles of constitutional, federal, state, and civil laws as they apply to and affect law enforcement. Required course for Law Enforcement curriculum. (45-0)

80:292 Criminal Investigation (3 s.h.) Fundamentals of investigation, crime scene search and recording, collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, interviews and interrogation, follow-up, and case preparation. (45-0)

80:299A Special Problems in Social Sciences* (1 s.h.) Students may submit a proposal for a special project to an instructor. With the instructor's approval and the consent of the Division Chair and the Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. (15-0)

80:299B Special Problems in Social Sciences* (2 s.h.) Same as 80:299A. (30-0)

80:299C Special Problems in Social Sciences* (3 s.h.) Same as 80:299A. (45-0)

85 Speech & Theatre

85:101 Public Speaking (2 s.h.) Public speaking as an intellectual tool for use in argumentation and persuasion in a democratic society. (Offered each term.) (30-0)

85:105 Group Discussion (2 s.h.) Principles and techniques of group discussion methods and procedures based on parliamentary methods. (30-0)

85:150 Introduction to Theatre TV and Film (3 s.h.) A survey of dramatic theatre, television, and film. (45-0)

85:160 Stagecraft (3 s.h.) An introduction to the construction, painting, and shifting of stage scenery, including scene shop methods and maintenance. (45-40)

85:170 Introduction to Acting (3 s.h.) Basic principles of stage acting. Work in mime, monologue, and play cuttings to develop techniques of voice, gesture, movement, and characterization. (45-0)

85:299A Special Problems in Speech/Theatre* (1 s.h.) Student may submit a proposal for a special project to an instructor. With the instructor's approval and the consent of the Division Chair and the Vice President for Academic Affairs, credit may be given upon satisfactory completion of the project. Course may be repeatable for credit. (15-0)

85:299B Special Problems in Speech/Theatre* (2 s.h.) Same as 85:299A. (30-0)

85:299C Special Problems in Speech/Theatre* (3 s.h.) Same as 85:299A. (45-0)

89 Experiential Learning, Electives, EMT and Nurse Aide

89:100 A-B-C-D-E Cooperative Work Experience (1-5 s.h.) Practical training on the job under the cooperative supervision of the college and work supervisor. Designed primarily for the college transfer students to provide an experience that: (1) is directly related to their college program and career objectives; or (2) will help them test out career interest and/or discover new career possibilities. Credit is determined on the basis of one semester of credit for each 60 hours of approved employment to be completed in a term. Appropriateness of learning objectives is an essential factor in the approval process. 1-5 credits per semester, 12 credits maximum. (15-285)

89:120 Individualized Educational Planning & Assessment (1 s.h.) Prerequisite: Students must have the consent of the instructor. The introductory and required beginning course for the Individualized Competency Based Education Program (ICBE). It is designed to teach educational assessment and evaluation, career development and goal setting, degree pact writing and individualized educational planning. (15-0)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

89:151 Academic Success Seminar (2 s.h.) Designed primarily for freshmen. The focus is assisting in the development of effective study techniques and comprehensive skills necessary for independent learning and academic success. (30-0)

89:152 Career Decision Making (2 s.h.) Introduction to a structured career decision-making process, including self-awareness, career and educational information, computerized assistance, and related activities/projects. (30-0)

89:153 ACE-Action for College Education (1 s.h.) Prerequisite/Corequisite: For participants in the Student Support Services Project. ACE (Action for College Education) is a motivational behavioral modification program. The course cultivates a positive attitude and gives students the motivation to help themselves in a college setting. The goal is to instill confidence, eagerness, and enthusiasm toward obtaining a college degree. (15-0)

89:155 Financial Management/Insurance Internship (3 s.h.) The internship will provide practical application for each student. The activities will be in the actual insurance industry environment where each student will be afforded the opportunity to turn theory into application. (15-150)

89:163 Professionals in Health (2 s.h.) Presents skills and characteristics expected for professional preparation and employability. Provides an overview of the health industry, current trends, and issues. Discusses the work environment as it relates to health and safety regulations. (30-0)

89:164 Nurse Aide Theory (2 s.h.) Prerequisite/Corequisite: At least 14 years of age. Strength and endurance to meet the requirements in performing skills such as lifting and moving residents. Completed 16-hour video and workbook. Physical exam with Rubella Titer, TB test, hepatitis B vaccine or waiver. This 75-hour nurse aide course has been designed to meet the training requirements of The Omnibus Budget Reconciliation Act of 1987 (OBRA) for aides working in nursing facilities (NF) and skilled nursing facilities (SNF). Emphasis in the course is on students achieving a basic level of knowledge and demonstrating skills to provide safe, effective resident care. The course has been developed in six units of study. (30-0)

89:165 Nurse Aide Clinical (1 s.h.) This course is part of 89:164, Nurse Aide Theory. (0-45)

89:171 EMT-P: Part I (6 s.h.) Prerequisite: EMT-B and EMT-I State of Iowa Certification, or 89:189, EMT-I: Part I. This course provides the student with advanced prehospital training. It includes roles and responsibilities, overview of human systems, emergency pharmacology, airway management, patient assessment, and trauma management (including PHTLS). (60-60)

89:172 EMT-P: Part II (7 s.h.) Prerequisite 89:171, EMT-P: Part I. This course is a continuation of 89:171, EMT-P: Part I. It includes respiratory, cardiac, diabetic, neurological, toxicological, abdominal, gynecological, behavioral, pediatric, geriatric and obstetrical emergencies. (71-69)

89:173 EMT-P: Part III (3 s.h.) Prerequisite 89:171, EMT-P: Part I; 89:172, EMT-P: Part II. This course includes 68 hours of hospital clinical experience and 67 hours of field experience. (0-0-90-45)

89:174 EMT-P: Part IV (3 s.h.) Prerequisite 89:171, EMT-P: Part I; 89:172, EMT-P: Part II; 89:173, EMT-P: Part III. This course includes 67 hours of hospital clinical

experience and 68 hours of field experience. (0-0-45-90)

89:175 EMT-I (4 s.h.) Prerequisite: EMT-B State of Iowa Certification. This class provides the student with advanced skills to provide emergency care and transport. It includes roles and responsibilities, legal aspects, EMS system and communications, patient assessment, advanced airway management, shock management, including intravenous therapy and defibrillation. It also includes 45 hours of clinical/field experience. (30-30-45)

89:195 Emergency Medical Technician - Basic Part I (4 s.h.) Prerequisite/Corequisite: Be at least 17 years of age at the time of enrollment. Be proficient in writing, reading, and speaking English. Hold or be eligible to obtain a current driver's license. Be physically and emotionally capable of performing basic emergency care skills. Current certification at the Basic Cardiac Life Support Health Care Providers Course with the American Heart Association. Physical examination required prior to beginning hospital clinicals with immunizations and hepatitis B vaccine or waiver. This class provides the student with the necessary knowledge and skill to perform basic emergency care and transport. It includes an introduction/preparation module, airway management module, patient assessment module, medical/behavioral emergencies module, and obstetrical/gynecological emergencies module. Six hours of clinical in the hospital and nursing home is also included. (47-24-6)

89:196 Emergency Medical Technician - Basic Part II (2 s.h.) Prerequisite/Corequisite: Be at least 17 years of age at the time of enrollment. Be proficient in writing, reading, and speaking English. Hold or be eligible to obtain a current driver's license. Be physically and emotionally capable of performing basic emergency care skills. Current certification at the Basic Cardiac Life Support Health Care Providers Course with the American Heart Association.

Physical examination required prior to beginning hospital clinicals with immunizations and hepatitis B vaccine or waiver. Must have completed EMT-Basic Part I (89:195). This class is a continuation of EMT-B Part I. It includes a trauma module, infants and children module, and operations module. Twelve hours of clinical in the hospital is also included. (20-14-12)

Study Abroad

Through NIACC's participation in the Iowa Community College Study Abroad Consortium, students have the opportunity for foreign study while remaining full-time NIACC students. Currently, the program is offered in London during the fall semester. On this program, students have the opportunity to earn 12 or more credit hours. Except for a mandatory Humanities offering, British Life and Culture (89:157 - 3 s.h.), course offerings are determined by the expertise of the instructor accompanying the students in any given semester.

Enrich Program

This program is recommended to students who do not meet the prerequisites for developmental courses. It is intended to lead to a one year General Studies diploma. Credit earned will not satisfy the requirements for an Associate degree and will not be used in calculating the cumulative grade point average for graduation. All courses in the program have been designed as pass/no pass.

30:048 Communication Through Reading and Writing, Enrich (4 s.h.) Prerequisite: Consent of instructor. This Enrich course will focus on strategies that enable adult students to understand and apply reading and decoding skills. Students will also learn strategies that enable them to express ideas clearly

and correctly in writing, and to successfully apply these writing and reading skills in their daily lives, at work, and in leisure activities. (60-0)

30:049 Communication Through Reading and Writing II (4 s.h.)

Prerequisite: Consent of instructor. This Enrich course will focus on strategies that enable adult students to understand and apply reading skills and to express ideas clearly and correctly in writing. Applications will be in daily life, at work, and in leisure activities. This course is designed to follow Communication Through Reading and Writing I, Enrich (30:048) but may be taken without that prerequisite. (60-15)

40:038 Enrich Math I (2 s.h.) Prerequisite: Consent of instructor. This Enrich course will focus on strategies that enable adult students to understand and apply mathematics in their daily lives, at work, and in their leisure hours. (30-0)

40:039 Enrich Math II (2 s.h.) Prerequisite: Consent of instructor. This Enrich course will focus on strategies that enable adult students to understand and apply mathematics in their daily lives, at work, and in their leisure hours. Focus will be on partials, both in decimal and fraction form. (30-0)

89:020 Civic Responsibility (3 s.h.) Prerequisite: Consent of instructor. This Enrich class is designed to teach the economic philosophy and structural construction of the American government. Stress will be placed on the citizen's role within that government. Economics and the individual consumer will be considered. (45-0)

89:030 Personal Management (3 s.h.) Prerequisite: Consent of instructor. This Enrich course will examine concerns faced by students as members of modern society. It is designed to assist students in mak-

ing sound decisions concerning physical, mental, and financial health, and to use nonworking hours in a creative way. Critical thinking skills will be emphasized as students analyze written documents, including those financial, legal, and medical. (45-0)

89:040 Skills for Job Seekers (3 s.h.) Prerequisite: Consent of instructor.

This Enrich course is designed to assist the student in structuring a job search. Written materials will include applications, resumes, and cover letters. Interviewing skills will be developed. Job-keeping skills will be emphasized. (45-0)

89:041 Career Decisions (3 s.h.)

Prerequisite: Consent of instructor. This Enrich course is designed to assist students in determining realistic career objectives and assessing personal strengths. Curriculum focuses on self-management skills, time, and organizational concepts. The class stresses both written and verbal communication skills. (45-0)

Quotable Quote:

*Life is a great big canvas,
and you should throw all the
paint on it you can.*

-Danny Kaye

Student Handbook

STUDENT HANDBOOK

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ADMISSIONS

Students begin the admissions process by contacting the Admissions Office located on the second floor of the Activity Center. Office hours are 7:45 a.m. to 4:15 p.m. Monday through Friday and by appointment. Special visitation days are held periodically throughout the year. For more information, call 641-422-4245 or 1-888-GO NIACC, Extension 4245.

Applying to the College

North Iowa Area Community College is an “open door” public two-year college. Generally, you will not encounter any problems in being admitted, but you must complete certain admissions steps. (Please note that admission to the College does not ensure admission to all programs offered.)

All application materials are to be submitted to the Admissions Office, North Iowa Area Community College 500 College Drive, Mason City, Iowa 50401. You may also complete an online application (www.niacc.com).

1. Carefully complete the NIACC Application for Admission. Your registration date will be established according to the date your application is received. Note that your social security number and intended major or program are required on the application.
2. Submit your high school transcript or GED scores with your application. (Upon graduation you should submit a final transcript.) [If you do not have your high school diploma or equivalent, contact the College to find out how we can help you earn one. A student will be allowed to take courses for one semester while obtaining the GED. The student will not be eligible for financial aid during the semester he/she is completing the GED.]
3. An assessment of your skills and abilities is required as part of the registration process. You may either submit your American College Test (ACT) scores or complete the COMPASS assessment at NIACC. COMPASS assessment is provided in Hampton, Charles City, Lake Mills, and Garner on a regular basis. Call the Admissions Office to schedule the COMPASS assessment.
4. If you have earned credits at another college, have your transcript(s) forwarded to NIACC.

Note: Students applying for the Associate Degree Nursing, Practical Nursing, LPN to ADN, Medical Lab Technician, Physical Therapist Assistant, Information Systems Technology, or E-Commerce, Web Design and Development Programs need to complete a specific packet of application materials available from the Student Services Office in the Administration Building, Room 104. Please call 641-422-4207 or 1-888-GO NIACC, Ext. 4207, for more information.

High school students may enroll in both high school and college classes provided their high school has knowledge of this concurrent enrollment. Whether these courses receive high school credit is entirely at the discretion of the high school administration. Post-secondary Enrollment Options (PSEO) classes are another option for top high school juniors and seniors (ask your high school counselor for more information.)

Orientation

All new and transfer students who are entering NIACC for the first time and who intend to take day classes are required to attend a new student orientation. During orientation students learn about NIACC policies and procedures, academic requirements, faculty expectations, and are given information about financing their education, student housing, and student activities. Students will also learn how to adapt to their new college environment.

International Students

International students who desire admission are sent an international student admission packet. A TOEFL score of 520 is required as evidence of command of the English language to profit from the curriculum. Also evidence of adequate financial resources is required of all international students. All required documents must be returned with the \$50 application fee before issuance of Forms I-20A and B (Immigration Certificate of Acceptance). Contact the Admissions Office for an international student admissions packet.

COUNSELING

Where and when are counselors available?

A counselor is available from 7:45 a.m. to 6:30 p.m. Monday through Thursday; and on Friday from 7:45 a.m. to 4:15 p.m. The Counseling Center is located in the Administration Building, Room 104.

Who may use the Counseling Center?

The counseling/advising service is available to all NIACC students. There is no charge for this service.

How do I make my first contact with the Counseling Center?

Since the services of the Counseling Center are offered to you on a voluntary basis, you may arrange for an appointment whenever you have something you wish to discuss with a counselor. However, should you feel the need to see a counselor immediately, feel free to come to the Counseling Center without an appointment. Arrangements for an appointment with a counselor are made with the secretary at the center during regular office hours or by calling 422-4207.

How does counseling work?

Your counselor's job is to help you gain a better understanding of the significance of your feelings, attitudes, aptitudes and other personal data in order for you to have a more realistic basis upon which to make your own decisions. The ultimate goal is to help you grow in self-understanding so that you can cope better with your immediate situation and any problems that may arise.

Academic Advising

When you register, you are assigned a counselor/advisor according to your major. Most students continue to work with this counselor/advisor; however, changes may be made.

Every effort is made to ensure the accuracy of information given in the curriculum section of the catalog, and academic advisors advise students to the best of their abilities. IT IS, nevertheless, THE RESPONSIBILITY OF THE STUDENT TO BE CERTAIN THAT THE COURSES SELECTED WILL MEET THE REQUIREMENTS FOR THE DEGREE SOUGHT. Students should correspond with the transfer college and obtain verification of their complete program at North Iowa Area Community College.

Career Counseling

Career counseling is available to assist students in making decisions about their college major and future career direction.

Students can make an appointment with a counselor for individual assistance or can attend career choices workshops offered on campus.

In career counseling, various assessments may be used to help students learn about their interests, personality preferences, values, and aptitudes and how they relate to their choice of college major and future career direction.

Student Support Services

Student Support Services is a federally funded grant project which helps eligible students stay in college and graduate. The Project offers counseling, tutoring, a college survival skills orientation course, career exploration, transfer assistance, and cultural awareness.

Recipients of these services must be citizens or legal residents of the United States who are currently enrolled in a credit program. Participants must meet at least one of the following eligibility requirements: first generation student, low income, and/or physically handicapped/learning disability. Students interested in these services should call 641-422-4105, or 1-888-GO NIACC, Extension 4105, or stop at the Student Services Office in the Administration Building.

Special Needs

NIACC endeavors to provide reasonable accommodations for students requiring special services. When students become 18 years old, they are legally their own advocates. As self-advocates, students with disabilities are expected to negotiate accommodations individually with faculty and staff. However, counselors will assist students with special needs to become self-advocates. The counselor works with students, administrators, faculty, and support staff to insure that students who are disadvantaged or have disabilities receive full benefits of NIACC Services. Persons in need of supportive services should contact the Counseling Center.

The student must submit a request for accommodation to their counselor. This request should describe the requested accommodation. The student is responsible for providing documentation of the disability. A request form is available from the counselor.

Vocational Rehabilitation Services

Rehabilitation services are available to eligible students attending NIACC. These may include medical and psychological assessment, vocational evaluation, counseling and guidance, assistive technology, job training, and job placement assistance.

You may receive more information by calling 422-4227 or by stopping by the Administration Building, Room 104K.

Substance Abuse Prevention and Referral

NIACC recognizes drug abuse as a potential health, safety, and security problem. Students needing help in dealing with such problems are encouraged to seek assistance from our college professional counselors and utilize the resources made available through the campus and the community.

BACCHUS

Boost Alcohol Consciousness Concerning the Health of University Students (BACCHUS) is a student club which promotes developing responsible habits, attitudes and lifestyles regarding alcohol and related issues. As a member of BACCHUS, your activities might include National Awareness Week, Red Ribbon Campaign, and peer education. You may also earn college credit. Contact Jonnie Webster, Counselor, for more information.

Informational brochures are available in the Student Services Office, the Activity Center, the Student Learning Center, and in our housing facilities.

College Policy

The unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance in college premises or while representing the college off campus is absolutely prohibited. Violations of this policy will result in disciplinary action, up to and including expulsion, and may have legal consequences. (See page 215.)

State Law

According to Iowa law anyone under 21 who is caught driving with a blood alcohol content of .02 or more will lose their driver's license or permit for up to 60 days. Temporary driving permits for school, work, or any reason, will not be allowed during the suspension period. Realize that .02 is a very small amount — as little as one beer or drink.

Student Health

Campus Health Services

Health services are available for students every Wednesday during the fall and spring semesters from 1-4 p.m. in the McAllister Hall, Room 104A (excluding breaks). Services are provided through the Mercy Family Care Network, Cerro Gordo Department of Public Health, and North Iowa Area Community College Counseling Center. The cost is \$20.00 for an examination and \$10.00 for consultation. HIV testing and counseling are free. An appointment is recommended and may be made through the Counseling Center.

Accident and Health Insurance

The purchase of student health insurance is voluntary at NIACC. Brochures identifying several plans are available in the Student Services Office. Uninsured students, or students enrolled in courses or activities where potentially hazardous situations may occur are encouraged to obtain health/accident insurance. Medical costs for treatment of illness or accident, not covered by personal insurance, must be paid by the individual student.

Emergencies

A referral will be made to a local medical facility when a student requires immediate medical attention. The student and parent will be responsible for the payment of such services.

FAMILY HEALTH LINE (formerly ASK-A-NURSE)
422-7777 or 1-800-468-0050

This is a community service which is offered 24 hours a day, 7 days a week and is staffed by an RN. The following services are provided: health information, physician referrals, community services and hospital services referrals.

Crime Awareness and Campus Security

The Student Right-to-Know and Campus Security Act (PL 101-542) requires colleges and universities whose students receive federal student aid to disclose and report program completion and graduation rates for students, for student athletes, and maintain certain campus security policies and campus crime information.

The following statistics, provided in compliance with the Federal Crime Awareness and Campus Security Act of 1990, are for your information. The first six statistics reflect the number of crimes reported on campus. The last three statistics reflect the number of arrests associated with each respective offense. If you have questions, contact the Vice President for Student Services.

July 1, 1998 - June 30, 1999

Reported Occurrences

Murder.....	0
Rape	0
Robbery	0
Aggravated Assault.....	1
Burglary.....	0
Motor Vehicle Theft.....	0

Arrests

Liquor Law Violations.....	0
Drug Abuse Violations	0
Weapons Possessions.....	0

Reporting Crimes

Students are encouraged to report all criminal incidents and/or suspicious activity to the Mason City Police Department. Any crime on campus or violation of the Student Conduct Code should be reported to the Vice President for Student Services.

Sexual Abuse and Sexual Harassment

The following policies, procedures, and guidelines may be applied to incidents of sexual abuse and sexual harassment. Sexual abuse is defined as sexual contact with an individual who is either unwilling or unable to consent to the sexual contact. Sexual harassment consists of unwelcome actions or language of a sexual nature which is affecting work or academic-related decisions or creates a hostile working or academic environment.

Members of the counseling staff understand the personal and potentially traumatic nature of these incidents and are available to provide students with support, information, and guidance in responding to incidents involving sexual abuse or sexual harassment.

What to do if you are sexually abused

There are a variety of options available to students who are sexually abused. Listed below are several options students may choose when attempting to resolve some of the issues associated with a sexual assault. An individual may select all of these options, or he/she may select none of them. One important component of recovery after a sexual assault is talking about the incident, and each person must choose the avenue that is best for him/her.

1. Contact the police immediately. Dial 911 from a campus extension phone or any other phone. Even if a person is unsure whether or not he/she wishes to file criminal charges, reporting the incident to the police helps maintain available options by preserving important evidence. An individual should not wash, douche, or shower following an assault because it could destroy evidence. Members of the counseling staff are available to assist students throughout this process.
2. Contact a trained sexual assault advocate. Advocates are available through the Sexual Assault Center and may be contacted by the police, emergency room personnel or directly through their answering service at 424-7433. Advocates are available 24-hours each day, and may provide valuable support and information.
3. Contact the Mental Health Center of North Iowa. Professional counselors are an invaluable resource in surviving a sexual assault. Counselors can provide immediate as well as long-term support and may be contacted at 424-2075.
4. Report the crime to the Vice President for Student Services. He/she can provide information about on-campus counseling services and campus disciplinary systems. The NIACC campus discipline system may be utilized for incidents where the parties involved are NIACC students. (See page 215.)

Sexual assault prevention programs are sponsored annually on the NIACC campus with the goal of promoting safe, healthy, non-violent relationships. Educational information is presented at New Student Orientation, during residence hall programs and at campus-wide informational sessions.

Sexual HarassmentIntroduction

As an educational institution, the College serves as a model agency in the community. Sexual harassment subverts the mission of the College, threatens the well-being of students, faculty and staff, and will not be tolerated.

Staff in positions of authority need to be sensitive to the potential for conflicts of interest in personal relationships with students or subordinate employees. When significant disparities in age or authority are present between two individuals, questions about professional

responsibility and the mutuality of consent to a personal relationship may well arise.

Definition of Sexual Harassment

The Equal Employment Opportunity Commission characterizes sexual harassment as "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature." Such behavior is illegal when:

- A. Submission to such conduct is made either explicitly or implicitly a term of condition of status as a student or employee;
- B. Submission to or rejection of such conduct by an individual is used as the basis for decisions affecting such individual's employment or academic progress; or
- C. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment.

Sexual harassment can also take place between peers. Any time questionable behavior takes place, whether during work, class, or other college functions, it should be reported.

Sexual harassment takes many forms, for example:

- repeated and unwanted staring, comments, or propositions of a sexual nature
- subtle pressure for sexual activity
- sexist remarks about a person's clothing, body, or sexual activities
- unnecessary touching, patting, hugging, or brushing against a person's body
- direct or implied threats that submission to sexual advances will be a condition of employment, work status, grades, or letters of recommendation
- physical assault

Policy

A. Because staff and students at North Iowa Area Community College have a right to be free from sexual harassment by colleagues, supervisors, or instructors, the College does not condone actions or words which a reasonable person would regard as sexually harassing or coercive. This means that the following behaviors will not be tolerated:

1. Abusing the dignity of an employee or student through insulting or degrading sexual remarks or conduct;
 2. Threats, demands, or suggestions that an employee's work status or a student's academic progress is contingent upon his/her toleration of or acquiescence to sexual advances.
- B. The relationship between faculty and students is central to the mission of the College. It is essential to

establish that the standard of expected conduct in that relationship goes beyond the normal description against sexual harassment. What might appear to be consensual, even to the parties involved, may in fact not be so. Recent court cases tend to support this view.

Faculty members exercise power over students, whether in giving them praise or criticism, evaluating them, making recommendations for their further studies or their future employment, or conferring any other benefits on them.

Therefore, the College will view it as unethical and inappropriate if faculty members engage in amorous relations with students enrolled in their classes or subject to their supervision, even when both parties appear to have consented to the relationship. Exceptions might be previous and ongoing relationships, such as husband and wife.

C. Education efforts are essential to the establishment of a campus environment that is as free as possible of sexual harassment and in which highest standards of conduct in consensual relationships are observed. There are at least four goals to be achieved through education:

1. Ensuring that all victims (and potential victims) are aware of their rights.
2. Notifying individuals of conduct that is prohibited.
3. Informing administrators about the proper way to address complaints of violations of this policy.
4. Helping educate the insensitive about the problems this policy addresses.

Courses of Action

- A. Students who feel that they have been the subjects of such harassment should advise the Vice President for Student Services.
- B. Staff members should advise their immediate supervisor, the Director of Human Resources, or the Vice President for Administrative Services.
- C. When informed or made aware of a possible harassment situation, the President will conduct an investigation utilizing the procedures outlined in the guidelines for "Handling Complaints Regarding Employees."

FINANCIAL AID AND SCHOLARSHIPS

FEDERAL AND STATE FINANCIAL AID

North Iowa Area Community College provides financial assistance in the form of grants, scholarships, loans, and part-time employment (work study) to meet educational expenses. Most of the assistance requires that the student demonstrate financial need. Students apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA).

The FAFSA application may be completed anytime throughout the academic year. However, NIACC must have a valid federal output document (Student Aid Report) on file by the last day of your enrollment, or by August 31, following the end of the award year, whichever is earlier.

Applications received at the Federal Processing Center by March 1 will be given priority consideration for financial aid.

To be eligible for financial assistance, a student must meet the following eligibility criteria:

1. Have a high school diploma or GED or have passed an independently administered ability to benefit test.
2. Be a U.S. citizen or eligible noncitizen.
3. Be enrolled as a regular student in an eligible program of study for the purpose of obtaining a degree.
4. Be registered with Selective Service, if required (most males from age 18-25).
5. Maintain Satisfactory Academic Progress.
6. Not owe a refund on a Federal grant or be in default of a Federal educational loan.

GRANTS

Federal Pell Grant

Federal grants awarded directly to students. Students must demonstrate need.

Federal Supplemental Educational Opportunity Grant

- Federally funded grants administered by NIACC
- Student must demonstrate need
- Awards limited to funds available

Iowa Vocational-Technical Grant

- Iowa resident
- Enrolled in Career or Career Option programs
- Student must demonstrate need
- Maximum \$650 grant
- FAFSA Application must be filed by July 1

Iowa Grant

- Iowa resident
- Student must demonstrate need
- Awards limited to fund available

The Iowa National Guard Tuition Assistance Program

The Iowa National Guard Tuition Assistance Program (INGTAP) may pay up to 50% of undergraduate tuition for active members of the Iowa Army and Air National Guard. Eligibility for this tuition assistance program is determined by the Adjutant General of Iowa and funding for the program is determined on an annual basis by the Iowa General Assembly.

Individuals must submit an application to their Unit Commander to apply for this program. The Adjutant General determines eligibility and then notifies the Iowa College Student Aid Commission (ICSAC) of approved applications. The College is notified by the Iowa College Student Aid Commission of the student's eligibility.

WORK STUDY

Iowa Work Study (SWS)

- Part-time work opportunities
- State funded for Iowa residents
- Student must demonstrate need

Federal Work Study (FWS)

- Part-time work opportunities
- Federally funded, NIACC administered
- Student must demonstrate need

Students will earn \$5.75 per hour. Students must complete the I-9 and W-4 payroll forms before they are allowed to begin employment. These forms can be completed at the NIACC Business Office. Students must complete a work study authorization before employment. This authorization allows NIACC to apply their earnings toward their college account. When the account is paid in full, the earnings will be released to the student at the address they provide. Students can choose to cancel their authorization; however, if they owe a NIACC bill, the check will be held in the Business Office until the debt is paid in full.

LOANS

Federal Perkins Loan

- Federally funded, low interest (5%) loans administered by NIACC
- Student must demonstrate need
- Awards limited to funds available

Nursing Student Loan

- Low interest (5%) loans
- Available to Associate Degree Nursing students
- Student must demonstrate need
- Awards limited to funds available

Federal Direct Stafford Loan

- Low interest (variable rate) loans, maximum rate of 8.25%
- Eligibility is determined from the Free Application for Federal Student Aid (FAFSA)
- Student must demonstrate need
- Maximum loan \$2625 for freshmen and \$3500 for sophomore students per year
- Department of Education loan origination fee of 3%

Federal Direct PLUS Loan

- Low interest (variable rate), maximum rate of 9%
- Loans available to parents of dependent students
- Financial need is not required
- Maximum loan amount limited to cost of attendance minus other financial aid
- Department of Education loan origination fee of 4%

Students that borrow federal loans will be required to complete an Entrance Counseling session prior to any disbursements. This federal requirement can be completed by attending an Entrance Counseling session with a Financial Aid officer, viewing the Department of Education's entrance video in the Student Learning Center, or completing the requirement on-line at www.ed.gov/DirectLoan/counsel. Upon completion of one of these sessions, the student must submit the Rights and Responsibilities checklist to the Financial Aid Office. When students have completed their degree requirements or drop below half-time status, they are required to complete an Exit Counseling session. Students can attend an Exit session in one of the same three ways as the entrance requirement. They will learn about the importance of repaying student loan obligations and the consequences they may face if they default on a Federal student loan. Repayment schedules and options will be explained to each student. For more information on the Federal student loan programs, you can visit their Internet site: www.ed.gov/DirectLoan.

Method and Frequency of Disbursing Financial Aid Disbursements

Upon receipt of the student's award letter and loan acceptance (if applicable), the financial aid will be transmitted to the Business Office and applied to the student's bill. The student's award letter will tell them when this approximately takes place. Any payment due the student, after payment of tuition and fees (and residence hall charges, if applicable), will be released to the student as scheduled by the Business Office. The first release of excess funds is usually two weeks after the beginning of the semester, and approximately every two weeks thereafter for aid finalized after the semester begins. NOTE: If students are first time loan borrowers, there is a Federal mandatory 30-day waiting period before funds can be released to students.

For additional information regarding application procedures, deadlines, financial need, and resources available, call the NIACC Financial Aid Office, 1-888-GO NIACC, Ext. 4168 or (641) 422-4168.

SCHOLARSHIPS**Foundation Scholarships**

Scholarships are made possible through the generous support of individuals, businesses, and industries throughout the North Iowa area.

Students wanting information about scholarships should contact the NIACC Financial Aid Office. Application deadline for most scholarships is December 1.

Trustees' Scholarships

Valedictorians and salutatorians from accredited high schools are eligible for full-tuition scholarships. Students must enroll full time by the fall semester following

their high school graduation. These scholarships are renewable, assuming the student maintains a 3.25 GPA and completes 24 semester hours.

President's Scholarships

These scholarships are automatically awarded to high school seniors with an ACT composite score of 23 or higher enrolling full time at NIACC by the fall semester following their high school graduation. The amount of scholarship increases depending on the ACT score. The categories are as follows:

ACT Composite 23 to 27	\$ 500
ACT Composite 28 to 30	\$ 1,000
ACT Composite 31 to 36	\$ 1,500

President's Scholarships may be renewable. The student must complete 24 semester hours and maintain a 3.25 GPA. If a student is awarded a Foundation Scholarship and is able to renew his/her President's Scholarship, an evaluation will take place to ensure the student receives the greater award.

Adult Part-time Scholarships

These community-based scholarships (up to \$500) are for adults from the Lake Mills and Charles City areas taking at least two, but no more than six semester hours of credit. Contact the appropriate center director.

Ambassador's Scholarships

The Ambassador Scholarship program provides financial incentives and rewards for promising NIACC graduates. The goal is to encourage strong academic performance by these Ambassadors as they pursue their studies at senior universities. Awards available under this program are made at the time of graduation and are usually in the amount of \$500. Applications can be picked up at the NIACC Financial Aid Office.

Residence Hall Scholarships

These scholarships are awarded to both returning and new students who have shown good citizenship and leadership in a group living environment. Academic ability is also considered. Applications are available through the Financial Aid, Admissions, or Residence Hall Offices.

Pappajohn Entrepreneurial Scholarships

These scholarships are awarded to students who have established an interest in entrepreneurship and plan to continue their education in this area. Awards are based on academic ability and interest and experience in the field. Applications are available through Financial Aid, or the Pappajohn Center.

Special Talent Scholarships

These scholarships are awarded by staff involved in the specific program area. Typically, special talent scholarships are awarded in vocal music, instrumental music, journalism, art, athletics, and theatre. Contact the departments for further information.

Study Abroad Scholarships

These scholarships are awarded to students who plan to participate in either short-term or semester-long College-sponsored Study Abroad opportunities, and who

have earned 12 semester hours with a 2.50 GPA or better. Financial need, and academic ability are also considered. Applications are available through the Financial Aid Office.

Will F. Muse Scholarship Fund

The Will F. Muse Scholarship Fund was established by Mrs. Ralph (Elizabeth Muse) Norris in memory of her father. Annual awards help students reach education goals at NIACC or the college of their choice. Awards for 2001-2002 are \$650 per semester.

To be eligible, applicants must be high school graduates or must possess a general equivalency degree. Priority is given to residents of Cerro Gordo County. Applications, available from the Financial Aid Office at NIACC, must be completed and submitted by March 1.

Recipients must agree to submit official transcripts showing successful completion of work for the period covered by the grant award.

Christopherson Medical Scholarship Fund

The Christopherson Medical Scholarship Fund was established by the family, friends, and associates of Dr. Joseph E. Christopherson and his wife, Evelyn, to encourage talented students from North Iowa to become a physician.

To be eligible, applicants must be premedical or medical students. Of premed students, priority is given to NIACC students. Application information, available from the Financial Aid Office at NIACC, must be completed and submitted by the March 1 deadline.

Scholarship Providers

Permanent Endowed Scholarship Funds

Dr. Carroll O. Adams and Velma I. Adams Scholarship
L. Earl Ashland Memorial Fund
Baia Scholarship
Dr. Martha Ann Thomson Barclay Scholarship
Clifford H. Beem Memorial Fund
Barbara Bush Scholarship Fund
Business & Professional Women
Carstensen Family Scholarship Fund
Cerro Gordo County Medical Society
Christopherson Medical Scholarship Fund
Caroline O. Colson Memorial Scholarship
George Coyan Memorial Scholarship Fund
Donald K. DePrenger Memorial Scholarship
Dr. John B. and Mary Jane Dixon Scholarship
Elgin G. Enabnit Scholarship Fund
Simon Estes Scholarship Fund
Fangman Memorial Fund
Edgar S. Gage Family Scholarship
Henry R. Giesman Memorial Scholarship
Bill and Rachael Gildner Scholarship Fund
Paul and Clara Gustafson Memorial Fund
Esther C. Haase Memorial Scholarship Fund
Ward D. Harrison Memorial Fund
Polly Hedgecock Memorial Scholarship Fund
Leon and Naureen Heiman Memorial Scholarship
Hermanson Scholarship
John and Donna Hitzhusen Scholarship Fund
Frank Hoffman Memorial Scholarship Fund
Robert H. and Mary Isensee Scholarship Fund
Rollo C. Keithahn Memorial Scholarship Fund
Harriet Klath Memorial Fund
Glen and Penny Krogh Scholarship Fund
Florence Liebl Memorial Fund
Kenneth A. Loeb Memorial Scholarship Fund

Art and Rachele Lundblad Scholarship
Charles W. and Mary Jane Maxon Memorial Fund
Becky K. McGee Scholarship Fund
NIACC Employee Scholarship Fund
NSB Bank Scholarship
North Iowa Automotive Technology Scholarship Fund
Opheim Family Scholarship
Esther Pagenhart Scholarship Fund
Alma Partridge Education Scholarship Fund
Allen D. and Ann Y. Patton Scholarship Fund
Hjalmer and Margaret Peterson Memorial Fund
Joel Picker Social Science Scholarship
Roger and Marie Pitman Memorial Fund
Terry D. Reichardt Memorial Engineering Scholarship
John S. Rothamel Memorial Scholarship
Schaefer Building Trades Scholarship
Marie J. Schalekamp Memorial Scholarship
Frank Schmitz Memorial Scholarship Fund
Hazel Simpson Scholarship
Kathleen Sonnesyn Memorial Scholarship
Steneker Family Fund
Esther L. Strickland Scholarship Fund
Helen Perkins Thompson Scholarship
George I. and Eunice A. Tice Scholarship
Dr. Calvin H. Warne Memorial Scholarship
Tom Wedeking Memorial Scholarship
Charles S. and Mildred M. Whitney Scholarship Fund
Maude Wilson Theatre Arts Scholarship Fund
Melvin "Bud" Wilson Scholarship

Term Scholarships (Sponsors vary annually)

Beta Sigma Phi Scholarship
Charles City Scholarship Fund
Communications Skills Scholarship
Cooper Company
Crow's Hybrid Corn Company
Curries Company Scholarship
Curries Mechanical Design Technology Scholarship
Delta Kappa Gamma XI Chapter
Ray Fank Memorial Scholarship
First Citizens National Bank Scholarship
Haas Chiropractic Scholarship Fund
Naomi and Thor Jensen Scholarship
Keegan Family Scholarship
Kitchen Cabinet Scholarship Fund
Lake Mills Scholarship Fund
Captain James E. Lovell, Jr. Scholarship
Paul and Barbara MacGregor Scholarship Fund
Angus MacNider Memorial Scholarship
Manufacturing Technology Scholarship Fund
Martin Marietta Scholarship
Ann Mason Memorial Scholarship
Mason City Chamber of Commerce
Masters' Chiropractic Scholarship
Mrs. John (Mildred) McMenimen Memorial Scholarship
Mercy Medical Center Auxiliary - North Iowa Scholarship
Loyal and Pearl Minor Memorial Fund
NBJ Corporation Fine Arts Scholarship
NIACC Alumni Association Scholarship
NIACC Board of Director's Scholarship
NIACC Bookstore Scholarship
NIACC/Family Practice Physical Scholarship
NIACC Foundation Board of Director's Scholarship
NIACC Foundation Tool and Die Technology Scholarship
Noon Kiwanis Club
North Iowa Area College Educators Association
Frederick J. Olson Memorial Scholarship
Tom Osborne Scholarship
John and Mary Pappajohn Scholarship
River City Street Rods Scholarship
Virginia Mae Rodgers Scholarship
Carletta Sinnett Rosenthal Memorial Fund
75th Anniversary Scholarship Fund
Bertha Stebens Fine Arts Scholarship Fund

Dean Stephens Memorial Scholarship
 Ira Stinson Memorial Fund
 30 Couple Marathon Scholarship
 3M Forest City Distribution Center Scholarship
 Wells Fargo Bank Scholarship
 Winnebago Mechanical Design Technology Loan/
 Scholarship Program
 Youngblood Family Scholarship

Other Scholarships and Loans

NIACC students are encouraged to seek out local groups which work independently to provide scholarships to NIACC.

Those wanting financial aid in the form of grants, loans, and employment should seek the assistance of the Financial Aid Office and the North Iowa Career Center. (Short-term emergency loans are made available by the Financial Aid Office from the Louis Bosveld Student Loan Fund.)

VETERANS' EDUCATIONAL BENEFITS

Current courses for college transfer and most career programs are approved for veterans' benefits. Generally those veterans who have been released from active duty fewer than 10 years ago under honorable conditions and who have served 181 days or more of continuous active duty are eligible. For further information contact the NIACC Veterans' Affairs Office in the Administration Building, Room 104.

SATISFACTORY PROGRESS FOR FINANCIAL AID RECIPIENTS

Federal regulations require that students maintain satisfactory progress while pursuing their educational course of study in order to receive financial aid. Students who apply for financial aid will have their academic records reviewed each semester to determine if satisfactory progress is being made according to the following guidelines:

- A. Full-time students enrolled in a four-semester program of study are allowed no more than six full-time equivalent semesters to attain an associate degree (whether or not aid is actually received during that time). Should a program require summer attendance, an appropriate proportion will be added.
- B. Full-time students enrolled in a two-semester program of study are allowed no more than three full-time equivalent semesters to attain a diploma (whether or not aid is actually received during that time). Should a program require summer attendance, an appropriate proportion will be added.
- C. Part-time students will be given proportionally longer to attain their degree.

In order to maintain satisfactory progress the following will apply:

A student enrolled full-time (registered for 12 or more credits) must complete ten credit hours per semester with a minimum cumulative GPA of 2.00.

A student enrolled three-quarter time (9-10-11 credit hours) must complete 7 credit hours per semester with a minimum cumulative GPA of 2.00.

A student enrolled half-time (6-7-8 credit hours) must complete 5 credit hours per semester with a minimum cumulative GPA of 2.00.

A student enrolled less than half-time will be expected to complete all course work attempted with a minimum GPA of 2.00.

Letter grades of I, N, W, Q, and F do not count toward completed credit. Letter grades of T, L, or P are used in credits completed. A letter grade of O exempts past grades earned by the student.

Remedial courses and repeated courses may be used as part of the student's load. However, maximum time frames still govern satisfactory progress.

Transfer credits will apply toward the maximum number of terms to attain a degree.

Probation

Any student failing to meet these standards will be placed on Financial Aid Probation. Any student on Financial Aid Probation will have one semester to bring his/her course work up to minimum standards. The student will still be able to receive financial aid for the probationary semester.

Termination of Financial Aid Eligibility

If a student fails to attain these standards by the end of the probationary semester, he/she will be terminated from further financial aid.

Reinstatement

To regain eligibility for financial aid, the student will have to bring their course work up to minimum standards at their own expense. It is the responsibility of the student to notify the Financial Aid Office that their course work meets minimum standards. A student may also submit a written appeal documenting mitigating circumstances (ex: withdrawal because of illness) that prevented him/her from meeting minimum standards. Appeals will be reviewed by the Vice President for Student Services and a written response will be communicated to the student.

Title IV Financial Aid Class Attendance Policy

Students receiving Federal financial aid **MUST** attend class on a regular basis **AND** make satisfactory academic progress. If you fail to attend class on a regular basis, your financial aid will be suspended. Federal repayment and/or refund calculations of financial aid will be based on class attendance as provided by your instructor(s). NIACC's attendance policy for arranged or on-line classes is documentation from the instructor that the student has made contact with the instructor and has made progress towards completion of the course. If you get Federal student aid, **and you do not attend class**, you will have to pay it back.

REGISTRATION AND RECORDS

REGISTRATION PROCESS

Registration

Registration consists of: (1) student selecting appropriate courses, (2) program planning with an academic advisor, and (3) payment of tuition and fees to the college. All steps must be taken before registration is complete.

Registration information for credit courses is included in the Adult and Continuing Education Bulletin mailed to all households in the NIACC area in August and December. For further information please call the Admissions Office at 1-888-GO NIACC, Ext. 4245.

Semester course schedules are available in the Student Services Office as soon as they are released by the Vice President for Academic Affairs Office.

Wait List Policy

If a student is placed on a course wait list by the Records Office at the time of their registration, they will remain on the wait list through the Wednesday before classes begin or such time that an opening occurs. If an opening does occur, the first person on the wait list will automatically be entered into the course. A new schedule and billing statement reflecting the change will be sent to the student. After the Wednesday preceding the term start date the wait lists will no longer be in effect. All wait lists will be dropped at that time. It will be the responsibility of the student, if still interested in enrolling in a class that was previously closed, to inquire at the Records Office as to the status of the class.

Auditing a Class

Students who wish to audit classes may do so on a space-available basis after classes begin with instructor approval. The student must meet the attendance requirements in a course but is not required to complete assignments, take examinations, or meet other class requirements. The charge for an audited class is one-half tuition cost per semester.

CHANGES IN REGISTRATION

Changes in Registration

Students should plan their academic programs carefully so that subsequent changes may be kept to a minimum. When necessary, changes may be made by consulting with a counselor or advisor and securing a "Schedule Change Request" card.

FAILURE TO ATTEND CLASS, ONCE REGISTERED, DOES NOT CANCEL REGISTRATION IN ANY CLASS OR CLASSES.

Failure to change registration except according to the above procedure will result in a grade of "F" recorded on the permanent record of that student.

A notation of "W" (withdrew) will be made on the student's permanent record if he/she officially withdraws prior to the published withdrawal date on the college calendar.

Adding/Dropping Course(s)

Adding a Course: Students who wish to add a course to their schedule must complete a Schedule Change Request form which is available from the Counseling Center. This must be completed within the first five days of scheduled classes or before the second meeting of an evening class.

Dropping a Course: Faculty signature(s) will be required for all credit courses dropped after the first week. The last day to drop a course will be the two-thirds point of the term.

Any change initiated by the student to drop a course, add a course, or change a course section, beginning the first day of the term will incur a \$5 charge per schedule card.

Withdrawal from College

A student who finds it necessary to withdraw from college before the end of the regular term should complete a student withdrawal form with assistance from a counselor/advisor and submit to the Record's Office. The last day for total withdrawal from all classes will be the two-thirds point of the term. Failure to do so may result in the issuance of failing grades in all subjects for which the student is registered. If it is impossible for the student to come to the College to withdraw, this may be done by mail and must include the student's last day of attendance.

IT SHOULD BE NOTED THAT REFUNDS (WHERE APPLICABLE) ARE BASED UPON THE DATE OF OFFICIAL WITHDRAWAL, NOT UPON THE LAST DATE OF CLASS ATTENDANCE.

Withdrawal from College cancels registration in all classes. There is no credit given for partial course work.

PAYMENT PLANS/POLICIES

One Payment Plan Per Semester

Pay each semester's charges in full. Fall semester bill will be sent in July and is due in full August 17, 2001. Spring semester bill will be sent in December and is due in full January 4, 2002.

Four Payment Plan Per Semester

Pay each semester's charges in four monthly installments. Fall semester bill will be sent in July with equal payments due August 17, September 17, October 17, and November 16. Spring semester bill will be sent in December with equal payments due January 4, February 4, March 4, and April 4. A 1% interest charge is assessed each month on the unpaid balance.

Extended Payment Plan

Pay fall and spring charges in 12 monthly installments beginning May 15; June 15 for the 11-month plan; or July 16 for the 10-month plan; ending April 15. A \$40 enrollment fee is due with the first monthly payment. If payments are received on time there is no interest or other charges. Payments will be deducted from your bank account. Application and COMPLETED FAFSA or SAR are required. Please contact the Business Office to obtain an application.

Failure to make payment (or file for financial aid) prior to the beginning of the semester may result in cancellation

of your schedule (August 17 for the Fall Term and January 4 for the Spring Term). Reinstatement is possible when payment is made and if the courses are still available. A \$25.00 re-enrollment fee will be assessed. If no payment has been made either directly or through financial aid by the 14th day of the semester, you will be administratively withdrawn from classes and are subject to dismissal from NIACC Housing.

If the student chooses not to attend or is unable to attend College, he/she must notify the Records Office in writing prior to the term start date. The student is held liable for tuition and fee charges should he/she fail to notify the Records Office in writing prior to the term start date.

All financial obligations must be cleared before 1) a student will be allowed to register for a subsequent term; 2) the student's academic transcript will be released.

TUITION AND FEES

Tuition

Tuition for attendance in any program is based upon two factors:

1. Number of credit hours for which the student enrolls.
2. Legal residence of the student.
 - a) Iowa and Minnesota residents pay at the rate of 100 percent.
 - b) Non-Iowa residents pay at the rate of 150 percent of the Iowa resident tuition rate.
 - c) Individuals 62 years of age and over pay one-half tuition and all fees.

The following tuition schedule is effective for all registrations occurring after June 30, 2001, and is subject to change or modification.

SEMESTER HOUR LOAD	IOWA RESIDENT TUITION	NON-IOWA RESIDENT TUITION
1	\$ 67.60	\$ 101.30
2	135.20	202.60
3	202.80	303.90
4	270.40	405.20
5	338.00	506.50
6	405.60	607.80
7	473.20	709.10
8	540.80	810.40
9	608.40	911.70
10	676.00	1,013.00
11	743.60	1,114.30
12	811.20	1,215.60
13	878.80	1,316.90
14	946.40	1,418.20
15	1,014.00	1,519.50
16	1,081.60	1,620.80
17	1,149.20	1,722.10
18	1,216.80	1,823.40
19	1,284.40	1,924.70
20*	1,352.00	2,026.00

***20 HOUR CAP ON TUITION AND FEES**

Fees

SEM. HOUR LOAD	MATER. LAB & SUPPLIES FEE	RECORDS FEE	STUDENT SERVICES FEE	STATE SUPPORT DIVERSION FEE
1	\$ 6.40	\$ 9.40	\$ 2.40	\$ 4.15
2	12.80	9.40	4.80	8.30
3	19.20	9.40	7.20	12.45
4	25.60	9.40	9.60	16.60
5	32.00	9.40	12.00	20.75
6	38.40	9.40	14.40	24.90
7	44.80	9.40	16.80	29.05
8	51.20	9.40	19.20	33.20
9	57.60	9.40	21.60	37.35
10	64.00	9.40	24.00	41.50
11	70.40	9.40	26.40	45.65
12	76.80	9.40	28.80	49.80
13	83.20	9.40	31.20	53.95
14	89.60	9.40	33.60	58.10
15	96.00	9.40	36.00	62.25
16	102.40	9.40	38.40	66.40
17	108.80	9.40	40.80	70.55
18	115.20	9.40	43.20	74.70
19	121.60	9.40	45.60	78.85
20*	128.00	9.40	48.00	83.00

***20 HOUR CAP ON TUITION AND FEES**

*Materials, Lab, and Supplies Fees support a variety of materials, supplies, computer, and library resources used in educational programs.

Applied Music Fees

Piano, vocal, & instrumental.....\$65/course credit hour
THIS FEE IS IN ADDITION TO TUITION/FEES PER CREDIT HOUR

Beginning Piano Fee\$65
(50:195 or 50:196) THIS FEE IS IN ADDITION TO TUITION/FEES PER CREDIT HOUR

Multi-Layer Switching Course Fee\$1,087.85
THIS FEE IS IN ADDITION TO TUITION/FEES PER CREDIT HOUR

Network Routing Course Fee.....\$1,087.85
THIS FEE IS IN ADDITION TO TUITION/FEES PER CREDIT HOUR

Network Remote Access Course Fee\$1,087.85
THIS FEE IS IN ADDITION TO TUITION/FEES PER CREDIT HOUR

Network Support Course Fee\$1,087.85
THIS FEE IS IN ADDITION TO TUITION/FEES PER CREDIT HOUR

Scuba Diving Course Fee

Total cost for the 1 s.h. course is \$207.10 which includes tuition, certification card, textbooks, pool work, and five open water training dives.

Other Fees

Transcript fee	no charge
Graduation fee	\$35.00

TUITION REFUND

Students who wish to cancel their registration must notify the Registrar's Office in writing before the first day of the term to avoid tuition/fee assessment. Beginning the first day of the term, it will be necessary for students to formally withdraw (complete the necessary forms with a counselor/advisor and submit to the Records Office) to terminate their registration. Tuition/fee adjustments (excluding the Records Fee) are made for withdrawals according to the following schedule:

16 Week Term Refund

1-5 Days of Term	90%
6-10 Days of Term	75%
11-15 Days of Term	50%
16-20 Days of Term	25%
After 20th Day	No Refund

(Days are defined as Monday through Friday. Day count begins with the beginning date of the term.)

3 ½-Week Term/6-Week Term/

8-Week Term Refund

1-3 Days of Term	90%
4-5 Days of Term	75%
6-7 Days of Term	50%
8-9 Days of Term	25%
After 9 days	No Refund

(Days are defined as Monday through Friday. Day count begins with the beginning date of the term.)

The same refund schedule will apply for individual courses that are dropped. The amount of refund will be the appropriate percentage between the tuition/fees charged for the new credit enrollment and the amount charged for the original credit enrollment.

THERE WILL BE NO REFUNDS FOR COURSES/TERMS UNDER 3 ½ WEEKS IN LENGTH.

TITLE IV RECIPIENTS REFUND AND REPAYMENT POLICY

The refund schedule for recipients of Title IV Financial Aid will be calculated in accordance with Public Law 105-244, The Higher Education Amendments of 1998.

The law requires that if a student receives financial aid and withdraws from school during the payment period or period of enrollment in which the recipient began attendance, the school must calculate the amount of SFA Program assistance the student did not earn and those funds must be returned.

* Recalculation is based on the percent of earned aid using the following formula:

- Percent earned = Number of days completed up to the withdrawal date*/total days in the semester.

* Federal financial aid is returned to the federal government based on the percent of unearned aid using the following formula:

- Aid to be returned = (100% - percent earned) X the amount of aid disbursed toward institutional charges.

Institutions are required to return SFA funds on behalf of recipients in the following order:

1. Unsubsidized Federal Stafford Loans
2. Subsidized Federal Stafford Loans
3. Unsubsidized Federal Direct Stafford Loans
4. Subsidized Federal Direct Stafford Loans
5. Federal Perkins Loans
6. Federal PLUS Loans
7. Direct PLUS Loans
8. Federal Pell Grant
9. Federal SEOG
10. Other Title IV Assistance

In determining the amount of funds the student must return, the formula is as follows: Amount of Unearned Title IV Aid - School's Responsibility = Student's Responsibility.

Students must return funds in the following order:

1. Unsubsidized Federal Stafford Loans*
2. Subsidized Federal Stafford Loans*
3. Unsubsidized Direct Stafford Loans*
4. Subsidized Direct Stafford Loans*
5. Perkins Loans*
6. Federal PLUS Loans*
7. Direct PLUS Loans*
8. Federal Pell Grant x 50%
9. Federal SEOG x 50%
10. Other Title IV Assistance

* In accordance with terms of promissory note.

When aid is returned, the student may owe a bill to NIACC. The student should contact the Business Office to make payment arrangements.

Examples of Title IV Refund Policy

Example #1:

Student withdraws on the 25th day after the start of the semester which is 109 days long, student earns 22.93% of his/her federal aid. 77.07% of federal aid is considered to be unearned. The unearned amount must be repaid to loan and/or grant programs.

Student received a Pell grant of \$1500 for the semester and is charged \$1000 for tuition and fees. On the 21st day, the student received a cash refund of \$500 for Pell grant that exceeded his/her cost. On the 25th day, the student officially withdraws from all classes.

\$1000 X 22.93% = \$229.30, the amount the college can apply to charges.

\$1000 X 77.07% = \$770.70, the amount the college must return to the federal government.

According to NIACC's Tuition Refund policy, the student is not entitled to a refund of charges.

Charges	\$1000.00
Earned aid	-343.95
Adjusted balance due	\$656.05

Pell cash refund unearned = \$385.35 of which the student must return 50% or \$192.68.

Total amount student will owe = \$848.73 (\$656 to NIACC for uncovered tuition and fees and \$192 of unearned cash refund to the U.S. Department of Education).

Example #2:

Student stops attending all classes and fails to notify the Registrar's Office. When the college determined that the student ceased attending all classes, NIACC asks instructors for the last date of attendance. When this documentation is gathered, NIACC will use this date as the student's unofficial date of withdrawal, if it is later than the 50% point of the semester. Assuming that the 50% point is used, the student will have earned 50% of his/her aid and the other 50% is considered unearned and must be repaid to the loan and/or grant programs.

The student received a Pell grant of \$1500 for the semester and was charged \$1000 for tuition and fees. On the 25th day he/she received a cash refund of \$500 for Pell grant that exceeded their cost. The student stopped attending all classes but did not officially withdraw.

$\$1000 \times 50\% = \500 , the amount the college can apply to charges.

$\$1000 \times 50\% = \500 , the amount the college must return to the federal government.

According to the NIACC Tuition Refund policy, the student is not entitled to a refund of charges.

Charges	\$1000
Earned aid	<u>-\$500</u>
Adjusted balance due	\$500

Pell cash refund unearned = \$250. Student must repay one-half of this amount or \$125.

Total amount the student will owe = \$625 (\$500 to NIACC for uncovered tuition and fees and \$125 of unearned cash refund to the U.S. Department of Education.)

If a student owes a repayment of grants to the U.S. Department of Education, they will remain ineligible for federal aid until they resolve their repayment. Students will have an opportunity to resolve the overpayment by contacting the NIACC Business Office within two weeks of receiving notice and making payment arrangements.

* In determining the withdrawal date of the student, NIACC's policy will be:

- The date that the student began the withdrawal process by completing a Student Withdrawal Form with assistance from a counselor/advisor and submitting to the Records Office for withdrawal;
- The date that student otherwise provided official notification to the school of the intent to withdraw; or
- If the student did not begin the withdrawal process or otherwise notify the school of the intent to withdraw, the midpoint of the payment period for which

the financial aid assistance was disbursed or a later date documented by the school.

If the school determines that a student did not begin the withdrawal process or otherwise notify the school of the intent to withdraw due to extenuating circumstances, the school may determine the appropriate withdrawal date.

CLASSIFICATION OF STUDENTS

Freshmen - a student who has earned less than 27 semester hours of credit toward the completion of an associate degree; a student enrolled in a one-year career program or certificate program; or a student who has not yet enrolled in the second year of a program.

Sophomore - a student who has earned 27 or more semester hours toward the completion of an associate degree; or a student enrolled in the second year of a program.

Full-time - a student registered for 12 or more semester credits.

Part-time - a student registered for 11 or fewer semester credits.

Students shall also be classified as resident (in-state) or nonresident (out-of-state)

CREDITS AND GRADING

1. Students From Accredited Colleges and Universities

Credit will be granted for courses taken at colleges or universities accredited by the North Central Association of Colleges and Secondary Schools or similar regional associations. Each student shall submit an official transcript to the Admissions Office bearing the original seal of records from each college or university the student has previously attended. Generally, credit will be awarded for courses in which the student has earned a grade of "C" or better.

2. STUDENTS FROM NONACCREDITED COLLEGES

NIACC may recognize credit from a nonaccredited college or may admit the applicant on a provisional basis and provide a means for the validation of some or all of the credit. The validation period shall not be less than one semester and will ordinarily be a full academic year. NIACC will specify to the student the terms of the validation process at the time of provisional admission. The Registrar will evaluate the transfer credits.

3. TRADE/TECHNICAL CREDIT

Generally, NIACC does not recognize credit from a trade or technical college.

4. ACCEPTANCE OF CREDIT

- a. Acceptance of credit by NIACC does not guarantee acceptance at other colleges.
- b. Accepted transfer credit will be entered on the NIACC academic record after the student has completed course work at NIACC.

5. ARMED SERVICES CREDIT

Credit may be granted for valid educational

experiences received in the Armed Forces. Credit will be considered on the same basis as that followed in accepting transfer credit. *A Guide to the Evaluation of Education Experiences in the Armed Forces* will be used to aid in evaluation. NIACC uses the course evaluation/recommendation provided by American Council on Education (ACE). For further information, contact the Registrar's Office in Student Services.

Grading

The quality of your work is evaluated by the grades you receive. They are a measure of your learning experience. Grades are also the basis for transfer to another college. Generally, a student is not considered admissible by a four-year college without at least a cumulative grade point average of 2.00. To achieve your academic goal, it is important that you develop good study habits at the beginning of your enrollment at NIACC.

<u>Grade</u>	<u>Grade Points</u>
A	4.00
A-	3.67
B+	3.33
B	3.00
B-	2.67
C+	2.33
C	2.00
C-	1.67
D+	1.33
D	1.00
D- .....	.67
F .....	.00

I -The incomplete grade "I" is used when the instructor believes there is a reasonable chance the student can and will make up the work within a reasonable time frame and the student has been doing satisfactory work in class. An incomplete grade, if not made up within the instructor guidelines, will become an "F" one year after the end of the term.

W-The letter "W" will be given when a student officially withdraws from class(es).

Other Symbols:

- X - Course repeated
- N - Audit
- T - Credit granted by examination (test out)
- L - Credit granted for experiential learning
- Q -No credit/no pass (used in pass/no pass courses only)
- O -Grade requital (to be used only when Fresh Start is granted)
- P - Credit earned/pass

Policy for Grades Earned in Repeated Courses

Grades earned in courses which have been repeated will be administered and interpreted according to the following guidelines:

1. Grades earned in all registrations will be recorded on the permanent transcript.

2. In computing the cumulative grade point average for graduation, only the most recent grade earned in a course which has been repeated will be used.
3. For purposes of satisfying a prerequisite, the most recent grade earned in a course will be used.

Grade Point Average

The grade point average is determined in the following manner:

1. Multiply the number of grade points equivalent to the letter grade received in each course by the number of credit hours attempted for the course to arrive at the quality points earned in each course.
2. Divide the sum of quality points by the total number of credit hours attempted. The quotient represents the grade point average (GPA) for the term.

The cumulative grade average is determined in the same manner as the grade point average, except that all of the student's work at the college is taken into account. Note: Developmental courses are not used in calculating the cumulative grade point average for graduation.

Grades and Reports

Midterm reports covering the work for the first half of each term will be available to all students. These reports are not recorded on the student's permanent record. Official reports showing final grades will be issued to all students at the close of the term and these will be recorded on the student's permanent record.

CREDIT BY EXAMINATIONS

1. PROFICIENCY EXAMINATION: Examinations are available for individual courses allowing students the chance to test out of courses in certain programs with permission of the faculty responsible for teaching the course.
2. ADVANCED PLACEMENT PROGRAM: High School students may earn credit through the Advanced Placement Program. Students must achieve scores of 3, 4, or 5 in order to qualify. Individual divisions may require additional documentation.
3. COLLEGE LEVEL EXAMINATION PROGRAM (CLEP): CLEP is a means of gaining credit through examination.

CLEP has two forms. General examinations measure college level achievement in the basic areas usually covered in the first two years of college. These areas are considered the general or liberal education requirements.

The second form is the Subject Examination. These measure achievement in specific college courses and are used to grant exemption from the credit for these courses.

CLEP tests are administered by appointment on the NIACC campus. A maximum of 30 semester hours of credit are allowed for CLEP General Examinations or a combination of General and Subject Examinations.

CLEP credit will not be awarded for courses already successfully completed. Accepted credit will be entered on the NIACC academic record after the student has completed course work at NIACC.

RESIDENCY POLICY GUIDELINES

The following guidelines shall be utilized for the purpose of determining the residency status of students (i.e. re-classification of non-resident students).

1. Students shall complete the appropriate “request for residency form” for classification as a resident of the State of Iowa, thereby establishing in-state tuition and fee charges.
2. Students shall submit the “request for residency form” to the Office of the Registrar.
3. Students requesting residency status shall submit documentary evidence of an established domicile within the State of Iowa.*

The student shall submit any three of the following:

- a. An Iowa driver’s license
- b. An Iowa vehicle registration
- c. Evidence of ownership of Iowa property
- d. An Iowa income tax return
- e. A voter’s registration card for the State of Iowa (by county)
- f. Rent receipts for a habitation (house, apartment, etc.) in the State of Iowa (for 90 days prior to academic term for which residency status is sought)
- g. Other similar evidence

4. Copies of the documentary evidence shall be attached to the “request for residency form.”
5. Students will be notified as to the approval or denial of their request for residency status by the Office of the Registrar prior to enrollment in the term for which residency status is sought.
6. The “request for residency form” and documentary evidence shall be filed in the Records Office.
7. Students may appeal the denial of residency status to the standing Residency Review Committee.

*Classification of residency status may be obtained by students who are not of majority age (at the time of application) through evidence submitted by the student’s parent(s) or legal guardian(s).

Reclassification of residency status is not retroactive. International students cannot establish residency while studying in this country on a temporary visa.

DEGREE REQUIREMENTS

Associate Degrees

Associate in Arts

Purposes of the degree:

1. Provide a degree goal for students who choose to follow a course of study which is specifically designed for transfer to a baccalaureate degree program.
2. Provide the essential general education, grade, and semester hour requirements for upper division status at most senior colleges and universities.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work consisting of courses whose principal design is for a baccalaureate program. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.
4. Completion of the following General Education Core with a minimum of 40 semester hours:

Communications8 s.h.

This requirement can be satisfied by baccalaureate-oriented communications or speech courses with a minimum of two courses in English composition.

Social Sciences8 s.h.

Humanities8 s.h.

Performance courses such as vocal and instrumental music may satisfy no more than four hours of this requirement.

Natural Sciences*8 s.h.

(including at least one math and at least one science course)

Distributed Requirement8 s.h.

(to be taken from among the four divisions above)

*It is recommended that students take a minimum of four semester hours of laboratory science.

5. Completion of the Academic Profile examination during the student’s final semester prior to graduation.

Associate in Science

The purpose of the Associate in Science degree is to provide a degree goal for students who choose to follow a Natural Science degree program.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work consisting of courses whose principal design is for a baccalaureate program. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.
4. Completion of the following General Education Core with a minimum of 37 semester hours:
 - Communications8 s.h.
 - Social Sciences/Humanities9 s.h.
 - Natural Sciences.....20 s.h.
(must include at least one math and at least one science course)
5. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in Science - Business

The purpose of the Associate in Science - Business degree is to provide a degree goal for students who choose to follow a course of study designed to give the student the option of obtaining employment in business or transferring to a four-year institution. Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. Degree.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work consisting of courses whose principal design is for a baccalaureate program. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC.

Developmental courses are not used in calculating the cumulative grade point average for graduation.

4. Completion of a minimum of 30 semester hours in business courses designated with the prefix 15.

5. Completion of the following General Education Core:

Communications8 s.h.

This requirement can be satisfied by baccalaureate-oriented communications or speech courses with a minimum of two courses in English Composition.

Social Sciences and/or Humanities9 s.h.

Natural Sciences.....3 s.h.

6. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in Science - Medical Secretary

The purpose of the degree is to provide a degree goal for students who choose to follow a course of study designed to give the student the option of obtaining employment as a Medical Secretary or transferring to a four-year institution. Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. Degree.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work consisting of courses whose principal design is for a baccalaureate program. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.
4. Completion of prescribed required two-year Medical Secretary curriculum.
5. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in Applied Science

Purposes of the degree include:

1. Provide a degree goal for students who choose to follow a course of study which is specifically designed to lead to employment upon completion of two years of study.
2. Provide the student with an entry skill level appropriate to the career for which he/she has been preparing.
3. Provide the student with increased potential to function in society through study in the general areas of communications, human relations, and natural sciences.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of a prescribed two-year career curriculum. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours, unless specified otherwise by a program's accrediting agency.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.
5. Completion of the Academic Profile examination during the student's final semester prior to graduation.

Associate in General Studies

Purposes of the degree include:

1. Provide a degree goal for students who choose to follow an individualized course of study which is not specifically designed for transfer to a baccalaureate degree program.
2. Provide an attainable associate degree for students who complete career programs of less than two years duration.
3. Provide an associate degree for career education students who wish to enroll in selected courses to reach a personal career objective.
4. Provide a degree goal for students whose educational goals shift after initial commitment has been made.
5. Provide a flexible associate degree for students who attend college on a part-time or other nontraditional basis.

Requirements for the degree include:

1. Completion of at least sixty (60) semester hours of work designed to meet the personal or career goals of each individual student. Developmental courses (course number has a suffix less than 100) cannot be used to meet this requirement.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area Community College including 15 of the last 30 semester hours.
3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.

Diplomas

This recognition is granted to a person who has completed at least thirty (30) semester hours of credit.

Program Diploma

Diplomas are awarded for the following curricula. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC. Developmental courses are not used in calculating the cumulative grade point average for graduation.

- Accounting with Computers
- Automotive Service
- Building Trades
- Climate Control Mechanics
- General Secretary
- General Machinist
- Legal Secretary
- Marketing and Sales
- Medical Assistant
- Medical Secretary
- Medical Transcriptionist
- Practical Nursing
- Supervision & Management

General Studies Diploma

The purpose of the diploma is to provide an achievement recognition:

1. For students who may choose to follow an individualized course of study which is not specifically designed for transfer to a degree program.
2. For career education students who wish to enroll in selected courses to reach a personal career objective.
3. For students who attend college on a part-time or other nontraditional basis.

Requirements for the diploma include:

1. Completion of at least thirty (30) semester hours of career courses designed to meet the personal or career goals of each individual student.
2. One-half of the required semester hours must be completed under the aegis of North Iowa Area

Community College including 15 of the last 30 semester hours.

3. A minimum overall cumulative grade point average of 2.00 (C) including a 2.00 (C) cumulative grade point average in all course work at NIACC.

Certificates

Certificates of completion are awarded to indicate that a student has satisfactorily completed a program of instruction other than those indicated previously. Certificates are usually issued to students upon completion of a short-term program of study with a 2.00 (C) grade point average.

GRADUATION

Application for Graduation

Students who plan to receive a degree or diploma must file an Application for Graduation form with the Registrar at the beginning of the semester prior to completion of college work.

The North Iowa Area Community College grants associate degrees, diplomas and certificates to certify the successful completion of programs of study.

Students must satisfy the graduation requirements in effect during the term of graduation or they may elect to graduate under requirements stated in the catalog at the time of initial entry if they have been continuously enrolled. Continuous enrollment is defined as consecutive fall and spring semesters. Under certain unusual circumstances students may appeal for an exception to graduation requirements to the Academic Affairs Council through the Vice President for Student Services. This appeal must be made prior to the start of the term in which graduation is expected to occur.

Acceptance of transfer credit by NIACC toward a degree does not guarantee acceptance at other colleges.

Graduation

Commencement exercises are designed to provide formal recognition to students who have satisfied the requirements for an associate degree or diploma. Since only one ceremony is held each year in May, students completing requirements prior to that commencement or at the end of the summer term following commencement may participate in the May ceremony or may elect to receive the degree or diploma at the time of completion of requirements.

Attendance at the Commencement Ceremony is one of the requirements for receiving a degree or diploma from North Iowa Area Community College. Students who are unable to attend commencement exercises must make application to the Registrar to graduate in absentia. Such application must be made at least 30 days prior to the exercises.

Dean's List

Full-time students who register and complete 12 or more graded credit hours with a 3.25 or better grade point average on graded credits during the Fall or Spring terms are qualified to be placed on the Dean's Honor List as published by the Registrar.

Part-time students who register and complete 6 to 11.5 graded credit hours with a 3.25 or better grade point average during the Fall or Spring terms are qualified to be placed on the Dean's Honor List as published by the Registrar.

Students who change their status from full-time to part-time during the term would not qualify for the part-time Dean's List as the requirements are that the student maintain the same status as initial registration.

Graduation Honors

A minimum of 30 semester hours of NIACC graded credit must be earned for degree honor recognition and a minimum of 15 semester hours of NIACC graded credit must be earned for diploma honor recognition. A student having earned an overall grade point average of 3.50 or more from NIACC will be graduated **WITH HIGHEST HONORS**. A student having earned an overall grade point average of 3.25 - 3.49 from NIACC will be graduated **WITH HONORS**. Transfer credits and developmental course credits are not used in the calculation of grade point average for graduation with honors.

Hall of Fame

Students completing an associate degree at North Iowa Area Community College with a scholastic record of all A's on graded credits will be admitted to the Hall of Fame. Members are recognized by having their names displayed on the hall of fame plaque in the Administration Building, and listed in the commencement program.

Disclosure of Graduation Rates

Graduation rates for our students are available in the Registrar's Office. Graduation rates for our student athletes by sport are available in the Athletic Director's Office, Vice President for Student Services' Office, or from the coaches.

Retention of Student Records

The official academic records of enrollment for credit earned by a student at North Iowa Area Community College shall be retained in perpetuity.

All student records documents which are used to create, update, and support the accuracy of the official academic transcript shall be retained for at least ten (10) years after a student's last enrollment. These documents may then be destroyed in the manner most appropriate.

All student financial aid records will be retained at least three (3) years following the end of the fiscal year for which funds were awarded.

All student cumulative folders which include the student's high school transcript and other academic information shall be retained for at least three (3) years after the student's last enrollment.

All veterans' records will be retained at least three (3) years following the ending date of their last enrollment.

Placement records (competency profiles) used to assist students and graduates in securing employment will be retained three (3) years from date of graduation.

Academic Transcript

To request an academic transcript, NIACC requires **written** authorization from the student. Request forms are available in the Records Office. If a student is unable to fill out the form at the Records Office, he/she may write or fax (641-422-4150) the Records Office to request a transcript. Transcripts of work completed at other schools are not available for redistribution by NIACC. A student may obtain his/her official NIACC transcript at no charge; however, if five (5) or more are requested at one time, there will be a \$2.00 charge per transcript fee.

The Family Educational Rights and Privacy Act (FERPA)

Directory Information

According to the guidelines stated in the Family Educational Rights and Privacy Act of 1974, NIACC can release **ONLY** directory information on a student without the written consent of the student. NIACC defines directory information as the following:

1. Name
2. Address
3. Telephone number
4. Date and place of birth
5. Field of study
6. Activities participation
7. Sports participation
8. Weight and height (for athletic teams)
9. Dates of attendance
(full-time/part-time status)
10. Degrees and awards received
11. Prior educational institutions attended
12. Deans list

Notification of Rights Under FERPA for Postsecondary Institutions

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

1. The right to inspect and review the student's education records within 45 days of the day the College receives a request for access.

Students should submit to the Registrar, Vice President, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.

Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want

changed, and specify why it is inaccurate or misleading.

If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contacted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by *North Iowa Area Community College* to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Police Compliance Office
 US Department of Education
 600 Independence Avenue SW
 Washington DC 20202-4605

NORTH IOWA AREA COMMUNITY COLLEGE HAS THE RIGHT TO DISCLOSE INFORMATION FROM STUDENT EDUCATIONAL RECORDS IF THEY CHOOSE WITHOUT WRITTEN AUTHORIZATION FROM THE STUDENT ACCORDING TO THE FOLLOWING GUIDELINES:

(Copied from the Guidelines for Postsecondary Institutions for Implementation of the Family Educational Rights and Privacy Act of 1974 as amended.)

2. Institutions must disclose education records or components thereof without written consent to students who request information from their own records.
3. Institutions may disclose education records or components thereof without written consent of students to:

- a. authorized representatives of the following for audit or evaluation of Federal- and State-supported programs, or for enforcement of or compliance with Federal legal requirements which relate to those programs (see 34 CFR 99.35 for additional conditions that must be met):
 - i. the Comptroller General of the United States,
 - ii. the Secretary of the Department of Education,
 - iii. state educational authorities.
 - b. state and local officials to whom disclosure is specifically required by State Statute adopted prior to November 19, 1974.
 - c. Veterans Administration officials (not covered by FERPA but specified under Title 38, Section 1790 (c), United States Code; see appendix 7).
 - d. other school officials within the institution determined by the institution to have a legitimate educational interest (see chapter 5.3).
 - e. officials of other institutions in which a student seeks or intends to enroll on the condition that the issuing institution makes a reasonable attempt to inform the student of the disclosure unless the student initiates the transfer, or the written policy of the institution (discussed earlier) includes a notice that the institution forwards education records to other institutions that have requested the records in which the student seeks or intends to enroll (see 34 CFR 99.34 for additional conditions that must be met).
 - f. persons or organizations providing financial aid to students, or determining financial aid decisions concerning eligibility, amount, condition, and enforcement of terms of said aid.
 - g. organizations conducting studies for, or on behalf of, educational agencies or institutions to develop, validate, and administer predictive tests, to administer student aid programs or to improve instruction. Those organizations may not disclose personally identifiable information on students, and information secured must be destroyed when no longer needed for their projects. Institutions are advised to obtain such assurance in writing.
 - h. accrediting organizations carrying out their accrediting functions.
 - i. parents of a student who have established that student's status as a dependent according to Internal Revenue Code of 1954, Section 152 (see appendix 7 and chapter 5.4).
 - j. persons in compliance with a judicial order or a lawfully issued subpoena, provided that the institution makes a reasonable attempt to notify the student in advance of compliance (see chapter 6.26.7 and appendix 15). NOTE: The institution is not required to notify the student if a federal grand jury subpoena, or any other subpoena issued for a law enforcement purpose, orders the institution not to disclose the existence or contents of the subpoena.
 - k. persons in an emergency, if the knowledge of information, in fact, is necessary to protect the health or safety of students or other persons. (According to 34 CFR 99.36, the wording of this section "shall be strictly construed.")
 - l. an alleged victim of any crime of violence (as that term is defined in 18 U.S.C. 16) of the results of any institutional disciplinary proceeding against the alleged perpetrator of that crime with respect to that crime.
4. Institutions may release without written consent those items specified as public or Directory Information for students who are currently enrolled, provided the following conditions are met prior to disclosure:
 - a. that the institution inform the students of information or categories designated as public or Directory Information,
 - b. that students be given the opportunity to refuse disclosures of information for any or all categories of directory information, and
 - c. that the students be given a reasonable period of time in which to state such refusals in writing.
 5. Institutions may release without written consent those items designated as public or Directory Information on any student not currently enrolled unless that student, at his/her last opportunity as a student, requested otherwise.

COLLEGIATE ATHLETIC PROGRAM

Ryan McGuire, Athletic Director

Coaches

- Baseball.....
- Basketball, Men’sSteve Krafcisin
- Basketball, Women’sJohn Oertel
- Cheerleading.....
- Football.....Dick Ramsey
- Golf.....
- SoftballJoe Yegge
- VolleyballRachel McGuire
- Men’s and Women’s SoccerJason Hoenshell

A full athletic program is maintained at NIACC. Men have the opportunity to participate in football, soccer, basketball, and baseball. Women’s intercollegiate sports are softball, soccer, basketball, and volleyball. Both men and women have the opportunity to participate in golf. These athletic offerings give NIACC one of the most diverse sports schedules for junior colleges in Iowa. The opportunity to participate is open to all bona fide students who have the desire.

NIACC is a member of the Iowa Community College Athletic Conference (ICCAC) and the National Junior College Athletic Association (NJCAA). The following are established criteria for participation in athletics at NIACC which are based on the policies established by NJCAA.

1. Students must be a high school graduate and show evidence thereof by submitting a diploma or a GED certificate. Official transcripts of all previous schools attended must be on file in the Admissions Office including both high school and college transcripts. Transcripts should be on file prior to enrollment but must be received before the eligibility roster is sent to the National Office.
2. Non-high school graduates can establish eligibility for athletic participation by completing one term of college work (passing 12 credits with a 1.75 grade point average or higher). This must take place after the student’s high school class has graduated.
3. A physical exam is required prior to the first practice by a qualified health care professional licensed to administer physical examinations.
4. In order to remain eligible, student athletes must pass 12 semester hours with a grade point average of 1.75 or higher the semester prior to the first year of athletic competition. For sports like basketball, which encompass both semesters, an athlete must pass 12 semester hours during his/her first semester to be

eligible during second semester. In order to be eligible during the second year of competition, all athletes must pass 24 semester hours with a 2.00 grade point average and pass 12 hours in their previous term with a 1.75 grade point average. It is the responsibility of the athletic director to certify the eligibility of each student athlete, who may be contacted for further information.

Some general rules for NIACC athletes transferring to a senior college are:

1. An Associate in Arts NIACC graduate is eligible for athletic participation immediately upon transfer to any four-year college.
2. Some colleges permit an athlete to transfer after two terms with 24 hours credit with a 2.00 grade point average and be eligible immediately.
3. NIACC coaches and officials make every effort to assist graduating athletes to continue their athletic endeavors at a senior college.

Athletic scholarships are available in limited number. These are awarded for the purpose of aiding athletes financially and providing talent on athletic teams in a highly competitive conference. The awards are based on:

1. Outstanding athletic ability.
2. Ability, desire and interest to do classroom work.
3. Recommendations.

Area athletes are given preference in these awards which are given for the term of their education at NIACC provided they stay eligible and conduct themselves in a manner that will not bring dishonor to themselves or the school. Athletic scholarships shall not exceed the costs of tuition, fees and books. These scholarships may be supplemented by other forms of financial aid available to all qualified NIACC students.

ON-CAMPUS HOUSING

North Iowa Area Community College, in cooperation with NIACC Dormitories, Inc., provides housing facilities for 480 single men and women. The residence hall is located at the north edge of the NIACC Campus and is within easy walking distance of classrooms, laboratories, the library, and the Activity Center.

The residence hall at NIACC has complete facilities for comfortable living. Rooms are carpeted and furnished with single beds, mattresses, draperies, wardrobes, individual study desks, chairs, telephone service, and cable television service. Students provide their own bed linens, mattress pads, blankets, pillows, and towels and maintain the cleanliness and orderliness of their own rooms. A refrigerator is available to rent. A computer lab is available for student use.

NIACC also provides apartment-style housing for returning sophomore residents who qualify based on their grade point average, and the ability to live with three other similarly qualified individuals. NIACC Dormitories has 12 such apartments; each apartment has two bedrooms, two bathrooms, a kitchenette, dining room and living room combination and a patio overlooking one of our two lakes. The Housing staff reserves the right to determine which residence hall residents will reside in the NIACC apartments.

Food service, located in a commons area, provides the student with a 15 or 19 meal plan per week. Recreation rooms and laundry facilities are available for residents. Two head residents live in the facility. A student advisor is assigned to each floor.

Fees for the 2001-02 college year are as follows:*

Application Fee (nonrefundable).....	\$25
Breakage Deposit (refundable).....	\$50

Room and Board

19 Meal Plan.....	\$1,725 per semester
	\$3,450 per academic year
15 Meal Plan.....	\$1,690 per semester
	\$3,380 per academic year

*These fees are subject to change.

All student housing is handicapped accessible.

Requirements to Live in Student Housing

Full-time freshmen students of North Iowa Area Community College are required to live in the residence hall. A student qualifying under one of the following shall be exempt from compliance with this rule:

- 1) Completion of twenty-seven (27) or more semester hours of college credit at the start of any term.
- 2) Residence with parent, legal guardian, spouse, grandparent, or adult sibling, provided sibling is a nonstudent or is married.
- 3) Attainment of twenty-one (21) years of age at the beginning of any academic term.

- 4) Designation as an international student, provided that there is an Affidavit of Support submitted and signed by a United States citizen of legal age.

A student who believes he or she has extenuating circumstances may petition the Director of Housing to be exempted.

Proof of compliance is the responsibility of every student seeking enrollment at NIACC.

STUDENT SENATE ACTIVITIES

Clubs, Organizations, and Activities

North Iowa Area Community College sponsors a wide variety of student organizations and activities. All student activities and the social calendar are to be coordinated through the Office of the Vice President for Student Services and the Student Senate Office.

Ag Club

If you're interested in agriculture, the Ag Club is intended for you. Activities may include trips to Denver and Chicago, livestock sales, Ag career seminars, fund raisers, and state and national conferences.

Art Club

If you're interested in extracurricular art activities, welcome to the Art Club. Art majors are highly encouraged to participate in this club; however, you do not have to major in art to benefit. The Art Club seeks to develop greater interest in the visual arts on the NIACC campus and in North Iowa. Artist workshops, field trips, social events, business meetings, and student exhibits are organized monthly by members. An annual spring bus trip to the Art Institute of Chicago gives you an opportunity to view internationally recognized art. Cash awards to deserving students are sponsored by the Club during the annual Iowa Student Competition.

BACCHUS

Boost Alcohol Consciousness Concerning the Health of University Students (BACCHUS) promotes developing responsible habits, attitudes, and lifestyles regarding alcohol and related issues. As a member of BACCHUS, your activities might include National Awareness Week, a Red Ribbon Campaign, and peer education.

Campus Outreach (COR)

Join students of all faiths in Christian fellowship through this organization. COR, which meets at the OK House across from campus student housing, sponsors dances, recreational activities, and volunteer activities for all students.

Dance Team

The NIACC Dance Team performs during halftime at basketball games and features routines developed by its members. The squad began in 1996 with 7 participants and grew to 9 members in 1997 through the process of tryouts. The team has been well received by fans at the games and is a great way to promote school spirit.

Forum Club

If you like to debate, join other students and NIACC faculty in discussing current controversial topics such as the environment, politics, and social issues. The Forum Club sponsors a series of speakers throughout the year.

Instrumental Music

You can actually join up to four ensembles right at NIACC — The North Iowa Concert Band, North Iowa Symphony Orchestra, NIACC Jazz Ensemble, and NIACC Pep Band. The Concert Band and Symphony Orchestra are composed of NIACC students and community members from North Iowa, and membership in the Orchestra and Jazz Ensemble are by audition only. Private lessons are also available.

Intramurals

The intramural sports program provides you an opportunity to participate in a sport of your choice on both a competitive and informal recreational basis. Activities may include basketball, free-throw contest, golf, one-on-one basketball, softball, flag football, volleyball, weight lifting, soccer, coed volleyball, card tournament, and more.

NIACC does not subscribe to an insurance program for intramural participants. Students who participate in any intramural event must assume their own responsibility for insurance coverage.

Karate Club

The Japan Karate Association (JKA) at NIACC is open to students and staff interested in the art of Karate-do. Training with the Karate Club can improve your flexibility, conditioning, strength, balance, coordination, and ability to defend yourself. Rank acquired through JKA at NIACC is recognized at JKA clubs and schools throughout the world.

LOGOS

Explore your journalism talents, from reporting to photography to advertising sales through *Logos*, the student newspaper. Published by students, *Logos* is an award-winning publication released every other week. Working diligently on the paper will give you one semester hour of credit for each term you contribute. The paper's editors receive scholarships and often have an opportunity to participate in national newspaper conventions.

Math Club

The Math Club provides various opportunities for students (with a range of mathematical abilities) to take part in mathematical activities and events and to interact on a more informal basis with the faculty. Since the Math Club began in the Fall of 1997, members have competed during the national student math league competition, attended Mathematical Association of America (MAA) meetings, and planned Math Awareness Week activities.

Multicultural Student Union (MSU)

Explore cultural diversity through this organization. MSU strives to heighten awareness and knowledge of various cultures, combat racism in all its forms, and develop human potential in NIACC students. People of all races, ethnic, and religious backgrounds are encouraged to participate.

Nursing Club

Nursing students will benefit from the Nursing Club, which hosts a holiday mixer for freshmen and sophomore nursing students the last day of fall semester. You can also attend state conventions for national nursing associations to hear interesting speakers on pertinent topics.

OK House

The Oikoumene Religious Center is an ecumenical religious organization serving postsecondary students in North Central Iowa. The Center, located just across from NIACC Dormitories, Inc. is open daily for students to drop in for social events, listening and referral services, recreation, counseling, study, support groups, contemporary worship experiences, and a serene environment. The OK House is supported by area churches.

Older Wiser Learners (OWLS)

If you've been out of the educational system for some time, OWLS may help you feel more comfortable. Older Wiser Learners are students 25 years of age and up who gather together to encourage each other, share success, solve problems, network, listen to speakers, plan projects, meet new friends, let off steam, cut red tape, and learn about the college system. You'll likely find strong support and friendships through this group which meets weekly for lunch.

Phi Theta Kappa

Expand your scholarship opportunities after NIACC by joining the College's Alpha Psi Beta Chapter of PTK, an international honor society that recognizes the academic accomplishments of students attending two-year colleges. To become a member, you must have a 3.5 GPA after completing 24 semester hours at NIACC and be enrolled in at least three semester hours of classes.

Physical Therapist Assistant Club

The PTA Club is open to students currently enrolled in the Physical Therapist Assistant Program. The Club promotes public awareness of physical therapy as well as professionalism and leadership among PTA students. Members meet monthly to plan physical therapy month activities, participation in the annual state student conclave, and social events.

Scuba Club

Interested in traveling to the Caribbean or West Indies? The Scuba Club can take you there! Participation is encouraged whether or not you have scuba diving experience. Trips, which are determined by the level of interest you and your friends show in the club, are usually scheduled during spring break or immediately following spring semester.

Student Environmental Affairs Group

The Student Environmental Affairs Group is composed of students working with NIACC's Environmental Affairs Council to raise environmental awareness on campus. Members discuss environmental issues and make recommendations to encourage environment-friendly decisions and practices at NIACC.

Student Senate

If you're interested in government, the Student Senate is a great way to get involved. Student Senators, who receive one semester hour of credit each term, attend statewide leadership conferences and student senate retreats, lobby at the state capitol in Des Moines, and represent the student body on various decision-making committees. They also plan most of the campus entertainment, including comedy club, movie nights, lectures, dances, games, singers, talk shows, cultural celebrations, and more.

Theatre Club

The club takes trips each year to see professional productions and attends the Mid-America Theatre Conference. The Club also offers a means for producing student work such as original scripts or student directed plays. The NIACC Theatre Department stages two major productions annually.

Vocal Music

If you like to sing, join the Concert Choir, which is open to all students, or sign up for private voice lessons. You might also try out for the NIACC Singers show choir, which performs locally and takes a major tour every other year to such places as Florida or Hawaii.

Student Services Fee Budget

The Student Services Fee Budget Committee, consisting of six members of the Student Senate, three faculty members and two members from the administration, meet with the various clubs and organizations and hear their requests. The budget is established in April for the subsequent year. The following budget has been approved by the Student Services Fee Budget Committee for 2001-2002:

ORGANIZATION BUDGET

Admissions/Orientation	\$ 3,000
Agriculture Club	\$ 1,000
Art Club	\$ 1,000
Cheerleading.....	\$ 1,750
Environmental Student Affairs	\$ 400
Forum Club	\$ 800
Health Services.....	\$ 4,500
Intercollegiate Athletics	½ of Student Services Fees
Intramurals	\$5,000
Karate Club	\$ 200
LOGOS	\$ 8,500
Math Club.....	\$ 600
Music, Instrumental.....	\$ 1,000
Music, Vocal.....	\$ 1,800
Nursing Club	\$ 850
Phi Theta Kappa	\$ 300
Physical Therapy Assistant Club	\$ 700

The remainder of the Student Services Fee is retained by the Student Senate for leadership development, student government, and general student activities programming.

NORTH IOWA CAREER CENTER

The North Iowa Career Center (Activity Center, Room 209) is an on-campus connection to the Workforce Development Partnership, a joint venture of Iowa Workforce Development, North Iowa Area Community College, and the Iowa Department of Human Services. This office provides a variety of services for students, alumni, and the general public including access to job listings, job search tools, and job fairs as well as a one-semester-hour-credit Employment Strategies course. In addition, students and alumni may make appointments for individualized assistance with job seeking skills and tools.

Placement statistics are maintained on career program graduates. Prospective students may utilize these statistics when determining a course of study. The North Iowa Career Center does not guarantee students or graduates employment. Rather the Center should be viewed as another avenue to follow in seeking satisfactory employment.

Companies are invited to send interviewers to the campus during the year. The North Iowa Career Center does not necessarily endorse interviewing companies. All students and graduates should investigate the integrity of these companies before accepting employment.

Cooperative Education Program

North Iowa Area Community College provides an educational program in which a student has the opportunity to blend theory and practice by combining classroom learning with planned and supervised field experience.

Cooperative Education is a concept which incorporates academic work with employment experience to provide a more meaningful and valuable total experience for the college student. The goal is to afford students the opportunity to enhance their academic knowledge, personal development, and professional preparation.

Credit is granted for the field experience in Cooperative Education. Students may earn up to 5 credits per term and apply 12 credits toward an associate degree. Appropriateness of learning objectives is an essential feature in the approval for credit process. For further information, contact the Student Services Center at 641-422-4207.

ACADEMIC/ DISCIPLINARY POLICY

Fresh Start

A. Please read the following sections carefully before deciding if a “Fresh Start” is right for you at this time.

1. The “Fresh Start” program is intended for students who change to a new program of study after receiving unsatisfactory grades in a previous program or for students who have performed poorly at NIACC. It allows the student cumulative grade point average (GPA) to be recomputed.
2. The “Fresh Start” is a one-time-only option. If a student experiences difficulty in a new program or subsequent semester, he/she may not apply for a second “Fresh Start.”
3. The student must be currently enrolled in credit classes at North Iowa Area Community College pursuing a degree, diploma, or certificate, and have successfully completed a minimum of 12 credits with a term grade point average of 2.00 or better and a 2.00 cumulative grade point average excluding the Fresh Start semester(s).
4. “Fresh Start” may span a maximum of two consecutive semesters of college credit courses. Students may not choose specific classes to be waived. **All courses** within the requested fresh start term would be amended, if approved.
5. Courses are not removed from the transcript by a “Fresh Start.” If a “Fresh Start” is approved, all courses in the approved term(s) will receive the grade symbol “O” for grade requital. Grades earned for the term(s) specified in the request will not be included in the computation of the student’s cumulative grade point average.
6. Students may petition for a “Fresh Start” for courses taken at least three years prior to the time of appeal.
7. Since the “Fresh Start” program is a North Iowa Area Community College policy only, it will generally not affect decisions made by grantors of financial aide or athletic eligibility or transfer institutions. Such outside agencies may still consider the complete transcript, not just the “Fresh Start.”

B. If you decide that you wish to pursue a “Fresh Start” in view of the previous information, or if you are not yet certain if this is the right option for you at this time, you may request a transcript from the Records Office and make an appointment to meet with a counselor or advisor to discuss this matter.

C. When you have obtained your transcript and written your letter of appeal addressing your previous situation and how that situation has changed so that you will be more successful academically, meet with the counselor or advisor. He/she will be able to look at

your records and your letter to go over the process with you to help you decide if you should proceed with the “Fresh Start.” If you decide not to proceed, no further action is required.

D. If you decide to proceed with the “Fresh Start” petition, the counselor or advisor should complete Section II of the petition. The counselor should sign and date this section.

E. The complete petition should be sent to:

Registrar
North Iowa Area Community College
500 College Drive
Mason City, IA 50401

F. The Records Office will proceed as follows when the decision is received:

1. Amend the student’s academic record based on the semester(s) indicated by the decision. The grades for the appropriate semester are amended to an “O” meaning grade requital which automatically is not calculated in degree audit.
2. Add the comment line, “Fresh Start Term,” after the appropriate semester(s) on the academic transcript.
3. Retain documentation of the decision in the Records Office for at least five years.

G. The student has the right to request reconsideration of the decision. Such an appeal must be made in writing to the Vice President for Student Services within thirty (30) days after the decision was communicated to the student. If the student wishes to appear in person before a Committee to support his/her request, the student should indicate that fact in the letter.

Academic Probation/Suspension

Probation: A student who does not attain at least a 1.50 cumulative grade point average will be placed on institutional academic probation by the Registrar. Unless specific corrections are made, probation may be followed by suspension.

Suspension: A written notice to a student of denial for further participation and/or registration in the College until a specified future date.

A student not meeting the minimum standard (1.5 GPA) for two consecutive terms may be notified by the Registrar that he/she is suspended for a 16-week term unless a successful appeal is filed with the Vice President for Student Services or designee.

Any student placed on probation or suspension is highly encouraged to visit with the NIACC counseling staff for assistance.

Technology Policy

1. Introduction

The technology facilities and services provided by North Iowa Area Community College, including computing, telecommunications and media services, are primarily intended for teaching, learning, student support, and administrative purposes. NIACC encourages staff to make appropriate and innovative use of such resources to further their learning. The use of technology and information resources is governed by all applicable College faculty, staff, and student policies as well as applicable federal, state, and local laws and statutes. It is not the intent of NIACC to provide access to technology and information resources for alumni, the general public, or for private use.

NIACC provides a number of computer labs to the general College population for course work and related educational endeavors. In addition, students enrolled in credit classes are offered a temporary personal Internet account, renewable each semester they are enrolled at NIACC. The policies outlined here apply to the use of these accounts.

2. Staff Access to Institutional Data

The value of data as an institutional resource is increased through its widespread and appropriate use; its value is diminished through misuse, misinterpretation, or unnecessary restrictions to its use.

Access to NIACC institutional data - the permission to view or query institutional data - should be granted to all eligible employees of NIACC for legitimate College purposes. Network accounts (Usernames) will be administered by NIACC Technology Services for all staff.

Data users will be expected to access institutional data only in their conduct of College business, to respect the confidentiality and privacy of individuals whose records they may access, to observe any ethical restrictions that may apply to data to which they have access, and to abide by applicable laws and policies with respect to access, use, or disclosure of information. Expressly forbidden is the disclosure of limited-access or internal institutional data or the distribution of such data in any medium except as required by an employee's job responsibilities. Also forbidden is the access or use of any institutional data for one's own personal gain or profit, for the personal gain or profit of others, or for political purposes.

Personal usernames and passwords should not be shared or used by another person. Violators will be subject to disciplinary action. Computer resources - both hardware and files stored on computers or servers are considered to be the property of the College.

3. Copyright

NIACC recognizes and adheres to U.S. and International copyright laws, software licenses, and intellectual property rights associated with both print and non-print materials.

NIACC forbids, under any circumstances, the unauthorized reproduction of software, or use of illegally obtained software. Using College equipment to make illegal copies of software is prohibited. NIACC employees and students who violate this policy are subject to disciplinary action. Individuals who violate U.S. Copyright law and software licensing agreements also may be subject to criminal or civil action by the owner of the copyright.

4. Internet Access

The Internet is an electronic communications system connecting millions of computers and individual users from all over the world. Internet access is coordinated through a complex association of government agencies, state, and regional networks. Smooth operation of the network relies on the proper conduct of all of its end users.

With access to computers and to people from all over the world, it is possible that users may access materials that might not be considered to be of educational value, may be controversial, offensive, or inaccurate. Any and all access and use of information or materials obtained via the Internet is at the users own risk. NIACC does not accept any responsibility for the accuracy and/or quality of information obtained through its Internet services.

It is expected that each NIACC employee and student will follow ethical and professional guidelines and abide by College policies when using College computer equipment and services to access the Internet.

5. E-Mail

Electronic mail or E-mail accounts will be available to all NIACC staff, students enrolled in credit classes, and in certain circumstances temporary accounts for students in Continuing Education classes. E-mail can be used internally for campus communications or via the Internet for electronic communications around the world. Appropriate use of E-mail for College-related activities will be expected. While electronic messages being sent or stored on networks or servers will be considered by NIACC to be private communications and the responsibility of the staff member or student, users should be aware that it is possible for a hacker or a network administrator at any point along the worldwide Internet communication path to intercept and view documents. NIACC will not be held liable for individual use of electronic mail or use of the Internet.

6. World Wide Web

The World Wide Web (WWW or Web) provides and opportunity for NIACC to have a presence in the Internet community for public relations, to provide information, and for educational purposes. NIACC's "Home Page" (or pages) on the Web represent the College's programs, policies, and image to the world. Development of Web Home Pages will be encouraged by NIACC departments, staff, and students (as part of an instructional activity), and should be maintained by each to remain current, accurate, and to appropriately represent the College. NIACC will recommend standards for NIACC Web pages on the Internet, but will not be liable for the content of personal web pages.

7. Responsible Use:

The user bears the primary responsibility for the material that he or she chooses to access, send, or display.

Respect the rights of others by complying with all College policies. Remember that you are representing the College in all of your communications.

Use only computer IDs or accounts and communications facilities which you are authorized to use, and use them for the purposes for which they were intended. Do not let others use your Username or password.

Students will be responsible for maintaining their own files that are stored on network drives including deleting files no longer in use, and copying files that they want to save to removable media (diskettes).

Staff will be responsible for maintaining their own files that are stored on network drives including deleting files no longer in use. Do not use up valuable network storage resources with unnecessary and outdated files.

8. Unacceptable Use:

The following unacceptable activities may result in suspension or revocation of this privilege, disciplinary action, as well as possible legal and civil action by the copyright owner and/or the College.

- a. Unauthorized copying of any software (including operating systems, programs, applications, databases, or code) which is licensed or protected by copyright.
- b. "Computer hacking" (i.e. unwanted or unsolicited entry into a computer system).
- c. Knowingly introducing a "computer virus" to a computer or network (i.e. a program - either harmless or damaging - which attaches itself to another program and/or has the capability to reproduce in order to infect other computers).
- d. Unauthorized access, willful damage, or misuse of systems, applications, databases, code, or data.

- e. Use of the campus network, the Internet, ICN, or other telecommunications or data networks for actions that constitute harassment (as defined by the NIACC Harassment Policy). This includes introducing inappropriate materials to the network, displaying for others to view or hear, or printing on College printers.
- f. Using the network or College equipment to conduct personal business for one's own personal gain or profit, for the personal gain or profit of others, for solicitation of services, or for political lobbying or campaigning.
- g. Allowing others to use your personal Username and password to access campus networks or the Internet.

The above items in this section are all unacceptable activities.

9. Use of NIACC Computer Labs:

- a. First priority use is for scheduled classes and workshops.
- b. Second priority use is for students doing assignments required for classes, or staff preparing for a class.
- c. Third priority use is for other academic uses such as exploration of the Internet and E-mail.

Please limit your time at the computers to one hour when there are other students or staff waiting. If you are not doing work specifically for a class, you may be asked to yield your spot to those who have class assignments to complete. Students violating the Technology Policies or the NIACC Student Conduct Code will be asked to leave and may face loss of computer and Internet privileges and/or disciplinary action.

Grade Appeal ProcessIntroduction

The following procedures are available for review of alleged capricious grading, and not for review of the judgement of an instructor in assessing the quality of a student's work. Capricious grading as the term is used is defined as one or more of the following:

1. the assignment of a grade to a particular student on some basis other than the announced standards for the course;
2. the assignment of a grade to a particular student by more exacting or demanding standards than were applied to other students in that course;
3. the assignment of a grade by a substantial departure from the instructor's standards announced during the first part of the term.

The assessment of the quality of a student's academic performance is one of the major professional responsibilities of College faculty members and is solely and

properly their responsibility. It is essential for the standards of the academic programs at North Iowa Area Community College and the integrity of the certificates, diplomas, and degrees conferred by this College that the professional judgements of faculty members not be subject to pressures or other interference from any source.

It is necessary, however, that any semester grade be based on evidence of the student's performance in a course, that the student have access to the evidence, that the instructor be willing to explain and interpret the evidence to the student, and that a grade be determined in accordance with announced guidelines. These guidelines should be announced in each class within the first quarter of the semester term.

At any time, a student may seek the assistance of a counselor from Student Services regarding the procedure in appealing alleged capricious grades or the merits of a particular case.

Appeal Procedures

A student who believes a semester grade is capricious may seek clarification and, where appropriate, redress as follows:

1. The student shall confer with the instructor, informing the instructor of questions concerning the grade, and seeking to understand fully the grounds and procedures the instructor has used in determining the grade. The aim of such a conference is to reach mutual understanding about the grade, the process by which it was assigned, and to correct errors, if any, in the grade.
2. If, after consultation with the instructor, the student believes that a grade is capricious, the student shall confer with the division chair, who shall consult and advise with both the instructor and student separately or together, in an effort to reach an understanding and resolution of the matter.
3. If steps one or two do not resolve the problem, the student may submit a petition in writing to the Academic Appeals Committee. This petition must be submitted through the Vice President for Student Services not later than the end of the fourth week of the following semester, excluding the summer terms. For students involved in programs where the grade will not allow progression, a revised time plan may be developed so the appeal can be heard prior to the next semester.
4. On the basis of a consideration of the student's petition, the instructor's response, and interviews by the chairperson of the Academic Appeals Committee with the student and the instructor, the Academic Appeals Committee shall conduct an inquiry which may include a meeting with the student and the instructor separately or together and ascertain and consider relevant facts.

The Committee should make one of the following decisions:

- a. That the grade was not assigned capriciously and shall stand as assigned.
- b. That the grade may have been assigned capriciously and merits further consideration.

The committee shall, as a result of its consideration, recommend an appropriate grade.

5. The decision of the Academic Appeals Committee will be communicated to the student by the chairperson of the committee.
6. If the student does not accept the decision of the Academic Appeals Committee, the appeal will then be forwarded to the Vice President for Academic Affairs for review. The Vice President shall review the case and shall make one of the following decisions:
 - a. Acceptance of the Academic Appeals Committee decision.
 - b. Request for the Academic Appeals Committee to reconsider its decision.

The Vice President for Academic Affairs shall review the case and consult with the instructor and the student either individually or collectively. On the basis of the review and the consultation, the Vice President for Academic Affairs (a) may direct the instructor to make the grade change and that decision shall be final, or (b) may request the Academic Appeals Committee to reconsider its decision. After a reconsideration by the Committee, its recommendations regarding the student's grade is final. Should the reconsideration of the Academic Appeals Committee involve a change in grade, the Vice President for Academic Affairs shall direct the instructor to make the grade change. In the event the instructor declines to make the grade change, then the Vice President for Academic Affairs shall authorize the Registrar to make the grade change, and such a decision shall be final.

7. If the student does not accept the decision of the Vice President for Academic Affairs, the student may choose to appeal to the President of the College.

NOTE: At all points of decision, the student, the instructor, the division chair, and any parties involved shall be notified promptly and no later than one week after each decision has been reached.

Composition of Academic Appeals Committee

The committee shall consist of two full-time staff members, one division chair, one Student Services staff member, and two full-time students selected by the College's Student Senate. The committee will be chaired by the Vice President for Student Services. If a faculty committee member is the instructor whose assignment of a grade is being appealed, then the Vice President for Academic Affairs will appoint a substitute faculty member to the committee in place of that instructor. If

a student committee member is appealing a grade, then the majority of officers of the Student Senate will select an alternate student committee member.

Student Conduct Code

Students are expected to conduct themselves in a responsible manner. Students who enroll accept our policies, regulations, and operational procedures. Student behavior, which after due process is found to be disruptive to classes or to destroy the rights of others or property, may result in disciplinary probation or suspension.

I. Statement of General Policy and Definitions

It is expected that each student will obey Federal, State, and local laws; will show respect for properly constituted authority; and will exhibit and maintain integrity and honor in all manners related to the college.

Definitions: In this code, unless the context otherwise requires:

- a. "Board" means the NIACC Board of Directors.
- b. "Class day" means a day on which classes are regularly scheduled.
- c. "College property" or "College facilities" means property, real or personal, owned, leased, controlled, or managed by the college.
- d. "Complaint" is a written statement which identifies an alleged violation and which sets forth the facts which constitute the violation. A complaint shall be prepared by the Vice President for Student Services and shall include a summary of the expected testimony of each witness in support of the allegation.
- e. "Vice President" means the Vice President for Student Services.
- f. "Faculty" means instructional employees.
- g. "Major violation" means one which can result in any disciplinary action other than suspension or expulsion from the College or denial of degree.
- h. "Minor violation" means one which can result in any disciplinary action other than suspension or expulsion from the College or denial of degree.
- i. "Student" means any person enrolled at the College, whether on a part-time or full-time basis, and includes a person accepted for admission to the college.
- j. "President" means the President of the College.
- k. "Violation" means any conduct, act, or omission to act, which violates a provision of this code, or a regulation, policy or administrative rule of the College or of the Board.

II. Standards: conduct which is contrary to any of the following may subject the student to disciplinary action and shall constitute a violation.

A. Student Identification: Students will be issued an I.D. card to be used for identification when attending college-supported, sponsored or supervised activities and in checking out materials from the library. A charge will be made to cover the cost of

replacement. Misuse of an I.D. Card may result in disciplinary action and shall constitute a violation.

- B. Use of facilities: A student or a student group or association shall comply with established administrative rules and board policies in planning for the use of facilities and in using the facilities.
- C. Speech and Advocacy: Discussion and expression of all views are permitted on college property, provided that:
 - a. peace and order are maintained.
 - b. college-sponsored, supported, and supervised activities, including instruction are not disrupted.
 - c. student activities, whether individual or group, are not disrupted.
 - d. state, federal, and local laws are not violated.

Individual students and campus organizations may invite speakers of their own choosing, provided a policy of the college or board or this code is not violated.

- D. Student Conduct: The following shall be subject to disciplinary procedures:
 - a. The unlawful manufacture, distribution, dispensation, possession or use of illicit drugs and alcohol on college property or as a part of any college-sponsored activity. Note: When college-sponsored events take place in states or countries where more lenient laws exist, the legal age shall be defined as 21. College sponsors of off-campus events have the right to develop and enforce more stringent rules (such as no alcohol).
 - b. Dishonesty, including but not limited to: cheating; plagiarism; knowingly furnishing false information to the college, forgery, alteration, or misuse of college documents or records.
 - c. Disruption of the orderly process of activities of the college, including unauthorized entry into, obstruction of, or occupation of any college property, and including obstruction of entry or exit to any college property.
 - d. Threatening, harassing, physically abusing, or endangering in any manner the physical or mental health and safety of any person.
 - e. Theft, willful destruction, damage or misuse of any property belonging to or in the possession of the college or belonging to or in possession of any person.
 - f. Illegal possession or use of any firearm, explosive, dangerous chemical, or other weapon.

- E. Financial Transactions with the College: The following shall be subject to disciplinary procedures and shall constitute violations:
 - a. Failure or refusal to timely pay a debt owed the college or NIACC Dormitories, Inc.
 - b. Presentation or delivery of any check, draft, or order to the college or to NIACC Dormitories, Inc., with intent to defraud.
 - c. Failure to pay the college the amount of a check, draft, or order, on or before the fifth class day after the

day the Business Office sends written notice that the drawee has rightfully refused payment on the check, draft, or order.

III. Disciplinary

A. Administrative

1. Investigation and Complaint

- a. When the Vice President for Student Services receives information indicating that a student has committed a violation, the Vice President shall investigate the alleged violation. After preliminary investigation, the Vice President may:
 - 1. Dismiss the allegation as unfounded, either before or after conferring with the student;
 - 2. Proceed administratively as provided below; or
 - 3. Prepare a complaint for use before the Student Conduct Committee (hereinafter designated SCC).
- b. The President may take interim disciplinary action, including, but not limited to, suspending the right of the student to be present on the campus and to attend classes, and restricting or altering the other privileges granted the student, when in the opinion of the President the interests of the College would best be served.

2. Notice to Appear

- a. A student may be ordered to appear before the Vice President in connection with an alleged violation by a notice from the Vice President personally served upon the student; provided, that nothing herein shall prevent the Vice President and student from agreeing informally to meet to discuss the alleged violation.
- b. The notice shall direct the student to appear at a specified time and place. The notice shall briefly describe the alleged violation and shall state whether the Vice President intends to handle the allegation as a minor or major violation.
- c. The Vice President may place on disciplinary probation a student who fails without good cause to comply with a notice ordering appearance, or the Vice President may submit the matter to the Student Conduct Committee, or to the President.

3. Disposition

- a. When the student appears before the Vice President whether informally or pursuant to notice, the Vice President shall advise the student of his rights as set forth in this code.
- b. A student may refuse administrative disposition of the alleged violation, and upon refusal, is entitled to a hearing before the Student Conduct Committee. The student must serve the Vice President with a written request for a hearing on or before the third day following the refusal to accept administrative disposition. The Vice President shall then inform the President that a request for a hearing has been made. A student's failure to timely make a written request for

a hearing shall constitute an acceptance of administrative disposition, except a signed acknowledgment as provided in IIIA3c shall not be required.

- c. If a student accepts administrative disposition, then the student shall sign an acknowledgment which states that the student understands the following:
 - 1. The nature of the violation.
 - 2. That the student has the right to a hearing at which the allegations must be proved by clear and convincing evidence.
 - 3. The penalty that may be or which will be imposed and its implications.
 - 4. That the student waives his/her right to appeal.
- d. The Vice President shall prepare an accurate, written summary of each administrative disposition and shall deliver a copy to the student, and, if the student is a minor, shall mail a copy to the parent or guardian of the student.

B. Student Conduct Committee (SCC)

1. Composition and Organization

- a. The SCC shall be composed of three administrative officers of the college other than an officer under the supervision of the Vice President. The members of the committee shall be appointed by the President.
- b. The SCC shall elect a chairperson from its members. The chairperson shall conduct the hearing and shall rule on the admissibility of evidence, motions, and objections; the chairperson's decision may be overridden on a vote of the committee. Each member of the committee, including the chairperson, is eligible to vote at the hearing.
- c. Chairperson: The chairperson shall set the date, time, and place for the hearing and shall issue subpoenas and subpoenas duces tecum upon the request of the Vice President or the student.
- d. The Vice President shall represent the college before the SCC and shall represent evidence to support an allegation of a violation. The Vice President and/or the student may be assisted by legal counsel.

2. Notice

- a. The SCC chairperson shall have written notice served upon the student and the Vice President, which notice shall set forth the date, time, and place for the hearing, as well as the nature of the alleged violation. The hearing date shall be not less than five (5) nor more than ten (10) class days after service of the notice. If student is under 18 years of age, a copy of the notice shall be sent by certified, return receipt requested, U.S. mail to the parents or guardian of the student.
- b. The chairperson may for good cause postpone the hearing.

- c. The SCC may hold a hearing at any time if the student has actual notice of the date, time, and place of the hearing, and the student makes written acknowledgment of said actual notice and written consent to the conducting of a hearing.
 - d. The notice shall direct the student to appear before the SCC on the date and at the time specified, and shall advise the student that he/she has a right to each of the following:
 - 1. To a private hearing;
 - 2. To the presence and assistance of legal counsel;
 - 3. To the presence of his parents and/or legal guardian;
 - 4. To the witnesses against him appear at the hearing and to confront and cross-examine each of them;
 - 5. To cause the committee to order witnesses to appear on his behalf and to require the production of documentary and other evidence possessed by the college, and to offer evidence and argue in his own behalf;
 - 6. To have a privately-paid stenographer present at the hearing and/or to record the hearing by electronic means;
 - 7. To appeal the faculty-student board of review;
 - 8. To remain silent during the hearing and to not have his silence used against him.
 - e. The SCC may suspend a student who fails without good cause to comply with a notice sent under these provisions, or, at its discretion, the SCC may proceed with the hearing in the student's absence.
 - f. The Vice President shall have the right to have a stenographer present at the hearing and/or to record the hearing by electronic means.
3. Preliminary Matters
- a. Alleged violations arising out of the same transaction or occurrence, or out of the same series of transactions or occurrences, against more than one student, may be heard together, or, either at the option of the committee or upon request by one of the students or the Vice President, separate hearings shall be held. Alleged violations by one student arising out of the same transaction or occurrence or out of the same series of transactions or occurrences shall be heard together. Alleged violations by one student arising out of unrelated transactions or occurrences may be heard together with the written consent of the student.
 - b. At least three (3) class days before the hearing date, the student shall in writing furnish the SCC with:
 - 1. The name of each witness he wants ordered to appear and a description of all evidence possessed by the college which he wants produced;
 - 2. Any objection that, if sustained, would postpone the hearing;
 - 3. The name of legal counsel, if any, who is to appear with him;
 - 4. A request for a private or separate hearing and the grounds for such request;
 - 5. A request to exercise any of the student's other rights stated in the notice.
 - c. When the hearing is held by consent of the student less than 5 days after service of notice or for other good cause shown, the student may submit the information described in paragraph b. immediately above at any time before the hearing terminates.
 - d. An objection, which if sustained would require the dismissal of the complaint, may be submitted at any time prior to the termination of the hearing.
4. Procedure
- a. The hearing shall be informal and shall be open to the public unless otherwise requested by the student in accordance with III B3b. If the hearing is to be private, the members of the student's immediate family, if requested by the student, may attend.
 - b. The hearing committee shall proceed generally as follows:
 - 1. The chairperson of the SCC shall read the complaint;
 - 2. The chairperson of the SCC shall inform the student of his rights, as stated in the notice of hearing;
 - 3. The Vice President shall present evidence in support of the alleged violation;
 - 4. The student shall present his/her defense;
 - 5. The Vice President and the student may present rebuttal evidence, and shall have the right to make argument. The Vice President shall have the right of the opening and the closing argument;
 - 6. The committee will vote the issue of whether there has been a violation and shall inform the student and the Vice President of their finding. If the committee finds a violation, the student and the Vice President shall have the right to submit evidence and argument as to the proper penalty;
 - 7. The committee shall then determine the penalty, if any;
 - 8. The committee shall state in writing each finding of a violation and the penalty determined. Each committee member concurring in the finding and penalty shall sign the statement. The committee shall include in the statement its reasons for the finding and penalty.
5. Evidence
- a. Rules of evidence shall not apply to hearings before the SCC, and the SCC may admit and give effect to evidence that possesses probative value and is

commonly accepted in the conduct of a reasonable person. The SCC shall not consider and may exclude irrelevant, immaterial, and unduly repetitious evidence. The SCC shall recognize as privileged communications between a student and a member of the professional staff, counseling center, or the Office of the Vice President for Student Services where such communications were made in the course of performance of official duties and when the matters discussed were understood by the staff member and the student to be confidential, as well as those communications which are privileged by law. Committee members may freely question witnesses.

- b. A student is presumed innocent until the Vice President has proved a violation by clear and convincing evidence.
- c. All evidence offered during the hearing shall be made a part of the hearing record. Documentary evidence may be included in the form of copies, extracts or abstracts, or by incorporation by reference. Real evidence may be photographed or described.

6. Record

- a. The hearing record shall include the student's written notice of appeal, the complaint, all tangible evidence admitted at the hearing, written motions, pleas, and any other materials considered by the committee and the committee's written findings, decisions, and determinations, a transcript if prepared by a certified court reporter, and an electronic recording of the proceedings if the same is delivered to the chairperson upon the termination of the hearing.
- b. If notice of appeal is timely given as hereinafter provided, the chairperson of the SCC shall deliver the record to the Board of Review, with a copy to the student and copy to the Vice President on or before the tenth class day after the notice of appeal is received.

C. *Faculty-Student Board of Review*

1. Right to Appeal

- a. In those cases in which the disciplinary penalty imposed was as prescribed in IV A (6) through (11), the student may appeal the decision of the SCC, or the decision of the President in an interim action to the faculty-student Board of Review. Disciplinary actions taken under IV A (1) through (5) cannot be appealed beyond the SCC. A student appeals by giving written notice to the chairperson of the SCC on or before the third class day after the day the decision or action is announced. This notice shall contain the student's name, the date of the decision or action, the name of his legal counsel, if any, and a simple request for appeal.
- b. Notice of appeal timely given suspends the imposition of penalty until the appeal is finally decided.

2. Board Composition

- a. The President shall appoint Boards of Review to hear appeals timely made under this code. Each board shall have three faculty members and two students appointed by the President in alphabetical rotation from available members of the review panel. A chairperson of each Board of Review shall be designated by the President. The duties and powers of all board members shall be the same as those of the SCC, except where otherwise provided. All matters shall be decided by simple majority vote.

- b. The review panel shall consist of ten (10) members, selected as follows:

- 1. Five (5) faculty members shall be appointed for three-year staggered terms by the President, who may consider but who is not bound by the recommendation of the president of the faculty association.

- 2. Five (5) students shall be appointed by the President of the College for one-year terms. Student members must have an overall 2.00 average on all college work attempted at the time of their selection to serve on the review panel and must not have a disciplinary case pending. The President may consider nominations submitted by faculty, staff, and students.

3. Consideration of Appeal

- a. The Board of Review shall consider each appeal on the record of the hearing before the SCC. For good cause shown, the board may remand to the SCC to consider and hear newly discovered evidence.
- b. The chairperson of the Board of Review shall give written notice to the student and the Vice President of the time, date, and place of the hearing which shall be held not more than 10 days after the receipt of notice of appeal, unless for good cause shown.
- c. The Board of Review will hear oral argument and will accept written briefs from the student and Vice President.

- d. The Board of Review may modify or set aside the finding of violation, penalty, or both, if the substantive rights of the student were prejudiced because the SCC's finding of facts, conclusions or decision were:

- 1. In violation of federal, state or local law, board or college policy or regulation or this code.
- 2. Clearly erroneous in view of the evidence contained in the record from the hearing before the SCC.

- e. The Board of Review may not increase a penalty assessed by the SCC.

4. Petition for Administrative Review

- a. A student may appeal the decision of the Board of Review by submitted a petition for review to the President within three days of the decision of the

board of Review. A student may submit a similar written petition to the Board of Directors within three days of an adverse ruling by the President, but the board need not consider such petition. The President shall automatically review every penalty of expulsion.

- b. A petition for review is informal but shall contain, in addition to the information required by IIIc1a notice of appeal, the date of the Board of Review's action of the student's appeal and the student's reasons for disagreeing with the Board of Review's decision.
- c. The President or the Board of Directors in their review may take any action that the SCC is authorized to take. They may receive written briefs and hear oral argument during their review.

IV. Penalties. The Vice President for Student Services, under IIIA or the Student Conduct Committee, under IIIB, or the Faculty Student Board of Review, under IIIC, may impose one or more of the following penalties for a violation:

- A. **Warning** - a written reprimand to the student to whom it is addressed.
- B. **Warning probation** - a warning indicating that further violations may result in suspension. Warning probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires.
- C. **Disciplinary probation** - a warning indicating that further violations may result in suspension. Disciplinary probation may be imposed for any length of time up to one calendar year and the student shall be automatically removed from probation when the imposed period expires. Students will be placed on disciplinary probation for engaging in activities such as but not limited to the following: being convicted of public intoxication or simulated intoxication, misuse of I.D. Card (minor violation), creating a disturbance in or on campus facilities.
- D. **Withholding of transcript or degree** - imposed upon a student who fails to pay a debt owed the college or NIACC Dormitories, Inc., or who has a disciplinary case pending final disposition. The penalty terminates on payment of the debt or final disposition of the case.
- E. **Bar against readmission** - imposed on a student who has left the college on enforced withdrawal for disciplinary reasons.
- F. **Restitution** - reimbursement for damage to or misappropriation of property. Reimbursement may take the form of appropriate service to repair or otherwise compensation for damages.
- G. **Suspension of rights and privileges** - an elastic penalty which may impose limitations or restrictions to fit the particular case.

H. **Suspension of eligibility** for official athletic and nonathletic extracurricular activities - prohibits, during the period of suspension, the student on whom it is imposed from joining a registered student organization; taking part in a registered student organization's activities, or attending its meetings or functions; and from participating in an official athletic or non-athletic extracurricular activity. Such suspension may be imposed for any length of time up to one calendar year. This disciplinary action will be imposed for engaging in activities such as the following: possessing or using alcoholic beverages on college property in violation of college rules; destroying college property or a student's personal property; giving false information in response to requests from the college; instigating a disturbance or riot; theft; possession, use, sale or purchase of illegal drugs on or off campus; an attempt to incur personal bodily injury which includes taking an overdose of pills or any other act where emergency medical attention is required; and conviction of any act which is classified as a serious misdemeanor, aggravated misdemeanor, or felony under state or federal law.

I. **Denial of Degree** - imposed on a student found guilty of scholastic dishonesty and may be imposed for any length of time, including permanently.

J. **Suspension from the College** - prohibits, during the period of suspension, the student on whom it is imposed from being initiated into an honorary or service organization; from entering college property except in response to a request of the college, and from registering, either for credit or for non-credit, for scholastic work at or through the college.

V. Miscellaneous

- A. In the event any portion of this policy conflicts with the laws of Iowa or of the United States, those laws shall be followed.
- B. All disciplinary proceedings will become a permanent part of the student's records maintained by the college.
- C. Evidence discovered as the result of an illegal search or seizure shall not be considered in determining whether a violation has occurred.
- D. Words and phrases herein shall be construed as in the singular or plural number, and as masculine, feminine or neuter gender, according to the context.

COLLEGE SERVICES

College Operating Hours

General

Buildings are open to normal student traffic:

Monday-Thursday:7:30 a.m. to 9:00 p.m.

Friday:7:30 a.m. to 4:15 p.m.

Administrative Office Hours

Monday-Thursday7:45 a.m. to 9:00 p.m.

Friday7:45 a.m. to 4:15 p.m.

Business Office

Monday-Thursday7:45 a.m. to 6:30 p.m.

Friday7:45 a.m. to 4:15 p.m.

Summer Hours: May 7-August 17, 2001

Monday-Friday7:45 a.m. - 4:15 p.m.

Faculty Office Hours

Hours for conference with students are arranged individually by each faculty member. The schedule of office hours is posted on faculty office doors.

Student Services Hours

Counseling Office Hours

Monday through Thursday7:45 a.m.-6:30 p.m.

Friday7:45 a.m.-4:15 p.m.

Contact the Counseling Center to schedule an evening appointment.

Financial Aid Office Hours

Monday - Friday7:45 a.m.-4:15 p.m.

Records Office Hours

Fall and Spring Semesters

Monday - Thursday7:45 a.m.-5:30 p.m.

Friday7:45 a.m.-4:15 p.m.

Summer Hours: May 7-August 17, 2001

Monday -Friday7:45 a.m. - 4:15 p.m.

BUS SERVICE

Mason City

Bus service is available between the campus and Mason City, Monday through Friday. The NIACC route is available at 10 minutes after the hour from 6:30 a.m. - 5:30 p.m. at a cost to students of 50 cents. For further information call City Hall at 421-3616.

Charles City

Bus service is available between the campus and Charles City, Monday through Friday at a cost to students of \$1.50 one way or \$3.00 round trip. You need to call (641)228-7177 at least 24 hours prior to the day you wish to ride.

Library

The role of the NIACC Library is to support the curriculum and to provide resources and services to meet the needs of students, faculty, and area residents.

The collection contains 28,700 general volumes, 9,700 nonbook media items, and 48,000 government publications. Subscriptions include 8 national newspapers, 44 NIAD area newspapers, and 370 periodicals with ten-year holdings of most titles. Also available are files containing up-to-date pamphlets, career information, and social concerns materials.

The library is open 70 hours per week, including evenings and Saturdays. A professional staff of two full-time librarians and one part-time librarian, assisted by three full-time assistants, and six student assistants provide service for all patrons. The library staff will provide assistance at any time. Library orientation sessions are offered at the beginning of each semester to inform students of library resources, policies, and procedures. A library handbook is also available. A student ID card is required to check out materials. ID's are available in Student Services.

A word-processing computer, a typewriter, and various types of media equipment are available for use in the library. Copying services are provided at a minimal cost.

The library is connected by computer to over 20,000 libraries across the country via the OCLC interlibrary loan system. This brings the libraries of the United States to NIACC students. A number of electronic databases, including a full-text periodical database, newspapers, electronic books, and encyclopedias on the World Wide Web, can be accessed through the library's web page. Many more CD-ROM databases, including reference materials and government resources are also available. Cooperative agreements with other Iowa community colleges and area libraries provide additional sources of information.

The library continues to implement the utilization of new technologies to meet the information needs of NIACC students. The library uses an online library catalog and circulation system to provide easy access to resources. Six Internet workstations are available for using the World Wide Web, and a CD-ROM network provides access to resources via the campus network.

Library Hours

Fall and Spring Semesters

Monday - Thursday7:30 a.m. - 9:00 p.m.

Friday7:30 a.m. - 5:00 p.m.

Saturday10:00 a.m. - 4:00 p.m.

Summer School

Monday - Thursday7:30 a.m. - 8:00 p.m.

Friday7:30 a.m. - 4:15 p.m.

Closed Saturday

Vacations

Monday - Friday7:45 a.m. - 4:15 p.m.

Closed Saturday

CLOSED HOLIDAYS AND SUNDAYS

Borrowing and Returning Library Materials

Any library material that you wish to borrow must be checked out at the circulation desk. The NIACC Library is equipped with a detection system to insure that all materials have been checked out. Materials not checked out will cause a bell to ring and the gate to lock. Occasionally there will be a false alarm with the system.

To return materials, place them in the book return bin at the circulation desk. After hours, use the book drop in the corridor outside the library.

Identification Cards

Your identification card, (I.D.), must be presented to the desk attendant each time you check out any library materials. Before checking out items the first time, a library staff member will add a barcode to your I.D. and activate your account. **IMPORTANT: YOU ARE RESPONSIBLE FOR ALL MATERIAL CHECKED OUT ON YOUR I.D. CARD.**

Report the loss of an I.D. card to the circulation desk immediately; however, the library does not assume responsibility for material checked out on lost cards.

OVERDUES, FINES AND LOST MATERIALS MUST BE RETURNED AND/OR PAID BEFORE A STUDENT MAY RE-REGISTER IN THE COLLEGE OR BE GIVEN TRANSCRIPTS.

Consult the NIACC Library Handbook for policies and procedures relating to the Library.

Lost and Found

If you lose or find an item on campus, please contact the Reception Desk in the Administration Building and/or the Athletic Office in the Activity Center.

Cafeteria HoursAcademic Year

Monday - Thursday.....7:00 a.m. - 3:00 p.m.
Friday.....7:00 a.m. - 2:30 p.m.

Summer Hours

Monday - Friday.....9:00 a.m. - 12:30 p.m.

College Book Store, Activity CenterHours

May 7 - August 179:00 a.m. - Noon
August 20-238:30 a.m. - 3:00 p.m.
August 24.....8:30 a.m. - 6:00 p.m.
August 27.....8:00 a.m. - 7:00 p.m.
January 148:00 a.m. - 7:00 p.m.

REGULAR BUSINESS HOURS

8:30 a.m. - 3:00 p.m. Monday - Friday

Book Store Additional Evening Hours

August 28, 29, 30.....5:00 - 7:00 p.m.
September 3 - LABOR DAYCLOSED
September 4, 5, 6,5:00 - 7:00 p.m.
January 15, 16, 17,
22, 23, 24.....5:00 - 7:00 p.m.

The Book Store is closed on holidays and weekends.

Check the Bookstore Website at www.niaccbooks.com for complete information and online ordering.

Textbook Refund Policy

Be sure to keep your Bookstore receipt. Observe the Bookstore Refund Policy that you receive at the time of purchase.

Please purchase all needed textbooks by the end of the third week of each semester. The Bookstore will begin returning unsold books to the publishers at that time.

Protect Your Books!

Once you know you are keeping your textbooks, mark them in some manner so you can identify them if they are lost or stolen. (For example: Put your name in the margin of a particular page of each textbook.)

Parking and Security

The Board of Directors of North Iowa Area Community College has adopted parking and traffic regulations in order to: (a) maximize pedestrian and vehicular safety; (b) ensure access at all times for ambulances, fire-fighting equipment, and other emergency vehicles; (c) make the parking facilities of the college available equitably to all of its members. Students are expected to know and comply with state motor vehicle laws and the traffic parking regulations of the college.

NIACC security patrol the parking lots. Security will ticket cars parked in violation. The Mason City Police Department is authorized to enforce parking regulations regarding fire lanes and handicapped parking.

NIACC reserves the right to remove a parked vehicle when it is in violation of regulations without prior notification and at subject's expense.

Physically handicapped persons parking in spaces designed for the handicapped must display a State of Iowa Handicapped Parking Permit. Information for permits may be obtained from the Vice President for Administrative Services.

EMERGENCY PROCEDURES

General

1. The safety and welfare of students, visitors, and staff is important to the institution. It is each individual's responsibility to engage in the cooperative effort required to establish and maintain a safe environment.
2. Students should become familiar with the buildings in which they have classes and locate the following:
 - a. Emergency exits
 - b. Fire pull stations
 - c. Fire extinguishers
 - d. Tornado shelters

Reporting

1. All serious illnesses and injuries should be reported immediately to an instructor or an administrator. This will be followed by the reporting student's participation in completing an accident report form.
2. Accident report forms are filed with the Business Office.
3. In the event of a serious accident or critical illness, the affected student's immediate family may be notified by the President or a designee.
4. Recognizing the student's right to privacy, public media information pertaining to serious or major accidents will be handled through the Community Relations Office.
5. Any crime on campus or violation of the Student Conduct Code should be reported to the Vice President for Student Services.

Fire

1. In case of fire, notify an instructor or administrator. If neither are immediately available, sound the building alarm system by use of the nearest pull station.
2. When the fire alarm is sounded, evacuate the building immediately in a calm and orderly manner. Do not assume a false alarm when the fire alarm system is sounded. The fire alarm system is used for fires only.
3. Make sure you move to a point at least 300 feet from the building. Do not return to the building until permission is granted by appropriate personnel (police, fire, or NIACC staff in charge at the scene).
4. Assist disabled students in evacuating from the building.

Tornado

1. It is important to know the following:
 - a. Tornado Watch - Conditions are such that a tornado could develop.
 - b. Tornado Warning - Sirens Sound - A tornado has been sighted. Seek shelter immediately.

2. Each building is equipped with a Civil Defense Indoor Warning Radio. When a watch is issued, the person monitoring the civil defense radio will notify staff in that building of the watch and the time period involved. Continuing Education monitors the civil defense radio during the evening hours and notifies the evening supervisors, custodial staff, and appropriate personnel of the watch and time period.
3. In the event of a warning, custodial staff and supervisory personnel will notify students in each building.
4. The recommended tornado shelter areas are posted in each classroom.
5. When the tornado siren sounds, immediately go to the designated shelter areas in a calm and orderly manner. Assist disabled students in getting to a designated shelter.
6. In the event you do not have time to reach a designated area, seek shelter in the lowest level of the building, under sturdy objects and against inner walls. Stay out of rooms with large windows, doors, and large roof spans. Crouch into as small a body position as possible.
7. Unless students are already in their cars and leaving the parking lot, they should not make an attempt to drive away from the tornado. A traffic jam at Highway 18 or 12th Street could cause more bodily injury than seeking shelter on campus or in a ravine. A car is not a safe place during a tornado.
8. "All Clear" will come from custodial or supervisory staff. The siren is NOT used to sound an all clear. Assist the emergency personnel as requested.
9. Generally speaking, modern concrete reinforced buildings, such as most of those on our campus, are usually not heavily damaged by a tornado. These structures will generally provide relatively safe areas during a tornado, providing students stay away from windows and doors. Safest areas are rooms on ground floor opposite to the approach direction of the tornado. Do not use elevators during severe storms or tornado warnings since electrical power may be disrupted.

Inclement Weather

The following guidelines will apply to cancellation or delay of College activities in case of hazardous conditions involving weather.

1. Cancellation or Delay of Classes - The decision to cancel or delay classes will be made by the President or a designee. If classes are delayed or canceled, the message will go to the radio and TV stations listed in this section by 6:00 a.m. No announcement of cancellation or delayed opening via the media by 7:00 a.m. will probably mean that classes will be held as

usual that day. (Sometimes, due to staff availability or changing weather conditions, there may be a delay in making announcements.)

<u>Station</u>	<u>Location</u>	<u>Frequency</u>
KLSS/ KRIB/KYTC	Mason City Mason City	106.1 FM, 1010 AM 1490 AM, 102.7 FM
KGLO/ KIA/FOX	Mason City Mason City	1300 AM 93.9 FM, 103.7 FM
KCMR	Mason City	97.9 FM
KCHA/ KWMM	Charles City Osage	96 FM, 1580 AM 92.7 FM
KLMJ	Hampton	104.9 FM
KIOW	Forest City	107.3 FM
KRIT	Clarion	96.9 FM
KUNY	Cedar Falls	91.5 FM
KAUS	Austin	100 FM, 1480 AM
KGLA	Algona	92.7 FM, 1600 AM
KIMT TV	Mason City	Channel 3
KAAL TV	Austin	Channel 6

2. Delay of Classes - Students and staff will report to the class normally scheduled for that period of the day and will complete the remainder of the schedule.
3. Community Education Centers - The Garner, Hampton, and Lake Mills Centers and classes are included in the general announcement unless specified differently. The Charles City Center is included in the general announcement of NIACC Mason City campus unless specified differently. The Charles City Center will remain open to serve community groups and receive phone messages even though day classes may be delayed or canceled. If weather conditions warrant, the NIACC Charles City Center may be closed by the President or his designee.
4. Early Dismissal of Classes - Should conditions develop during the day which would dictate that classes be dismissed early, the announcement of such dismissal will be circulated to the buildings by a member of the faculty or administrative staff. Students will not be used to circulate such information. The decision for early dismissal will be made by the President or his designee.
5. On-Campus Evening Classes - Any decision regarding on-campus evening classes (those starting after 6:00 p.m.) shall be made as early as possible with a target time of 3:00 p.m., and cancellation announcements will be given over area radio and TV listed above.

6. Off-Campus Evening Classes - If the class is held at a K-12 community school site, the decision is made by the local Superintendent of Schools with cancellation announcements initiated by him/her. If he/she closes the K-12 system, NIACC classes held in that community are likewise to be considered canceled.

7. Special Events and Auditorium Events - Such events will not be included in the general announcement issued by the College unless specified. Sponsoring organizations will be responsible for announcements of cancellations. EXCEPTION: If it is announced that the campus is closed, all activities are canceled.

Disposal Containers

Needle disposal containers are located in the following men's and women's restrooms:

- Activity Center 100
- Activity Center East Hall
- Activity Center Training Room
- Conference Center 180
- McAllister Hall First Floor
- Administration Building
- Murphy Technology Center
- Residence Hall - Main Floor
- Charles City Campus

Staff

PRESIDENT

David Buettner, *President*; 1981
B.S., Southern Illinois University; M. Ed., University of Illinois; Ph.D., Ohio State University

Linda See, *Assistant to the President*; 1968
Graduate, Hamilton Business College; A.A., North Iowa Area Community College; additional course work at Iowa State University

ACADEMIC AFFAIRS

Michael Morrison, *Vice President for Academic Affairs*; 1989
A.A., Austin Junior College; B.A., M.A., and Ph.D., University of Minnesota

Patrick Kennedy, *Assistant to the Vice President for Academic Affairs*; 1998
B.S., Bowling Green State University; M.A. and Ph.D., University of Illinois

Ronda Smith, *Administrative Assistant*; 1995
Diploma, Spencer School of Business; A.A., North Iowa Area Community College; additional course work at Mankato State University and Buena Vista University

Academic Faculty

Agricultural Technology

Larry Eichmeier, *Division Head*; 1982
A.A., North Iowa Area Community College; B.S. and M.S., Iowa State University; additional course work at Iowa State University

Chris Chodur, *Herdsman/Farm Worker*; 1993
A.A.S., North Iowa Area Community College

Kevin Muhlenbruch, *Agriculture Instructor*; 1988
B.S., Iowa State University; additional course work at Buena Vista University, Drake University, and Iowa State University

Laura Schurtz, *Agriculture Instructor*; 1990
A.A.S., North Iowa Area Community College; B.A., Buena Vista University; M.S., Drake University

Business

Gary Christiansen, *Division Head/Instructor*; 1979
B.A. and M.A., University of Northern Iowa; additional course work at University of Northern Iowa and Mankato State University

Wendy Demaray, *Business Division Associate*; 1991
Diploma, North Iowa Area Community College

Lynn Anderson, *Accounting, Computer Applications*; 1988
B.S., Mankato State University; M.A., University of Northern Iowa; C.P.A., Iowa Board of Accountancy; additional course work at Mankato State University, Drake University, and University of Iowa

Dan Chodur, *E-Commerce, Web Design & Development*, 2000
A.A., North Iowa Area Community College; A.S. North Iowa Area Community College; B.A., University of Northern Iowa; additional course work at Iowa State University

Mary Pat Cole, *Human Relations*, 1990
B.A., University of Northern Iowa; M.S.E., Drake University; additional course work at Iowa State University, Drake University, and Buena Vista University

Michael Dirksen, *Information Systems Technology*; 1988
B.A., Augustana College; B.S. and M.S., Mankato State University

Juanita Hanson, *Accounting Program Leader/Instructor*; 1985
B.A., Buena Vista; M.S.E., Drake University; additional course work at University of Northern Iowa and Drake University

Lawrence Hibbs, *Retail Management Program Leader/Instructor*; 1981
B.A. and M.A., University of Northern Iowa

Neal Hirota, *IST/E-Commerce, Web Design and Development*; 2000
A.S.B., North Iowa Area Community College; B.S., Oregon State University; additional course work at Iowa State University

Tullio Hofstad, *E-Commerce, Web Design and Development*; 2000
A.A., North Iowa Area Community College; B.A., Wartburg College; additional course work at Drake University and Iowa State University

Keith Jaben, *Information Systems Technology*; 1999
Course work at Kirkwood Community College, Iowa State University, and the University of Iowa

Kacy Larson, *Office Technology Program Leader/Instructor*; 1993
A.A., North Iowa Area Community College; B.A., University of Northern Iowa; M.S., Winona State University

Greg Lauer, *Accounting*, 1999
A.A., North Iowa Area Community College; Diploma, Hamilton Business College; B.A., Upper Iowa University; M.S., Iowa State University; E.A., Internal Revenue Service; additional course work at the University of Phoenix

Dennis March, *Information Systems Technology*; 1999
B.S. and M.S., Iowa State University

Jeanne McCurnin, *Office Technology*; 1990
B.S., Moorhead State University. Additional course work at the University of Iowa; additional course work at University of Iowa

Mary Mosiman, *Information Systems Technology Program Leader/Instructor*; 1998
B.A., Buena Vista University; additional course work at George Washington University

Alice Schamber, *Office Technology, Electronic Spreadsheets*; 1972

A.A., Ellsworth Junior College; B.A., University of Northern Iowa; M.A., University of Northern Colorado

Health

Donna Orton, *Division Head*; 1977

B.A., Augustana College; R.N., Iowa 047797, M.S.N., University of Dubuque; additional course work at Iowa State University, University of Northern Iowa, University of South Dakota, Marycrest College, Drake University, and Morningside College

Terri Tell, *Secretary*; 1975

A.A., North Iowa Area Community College

Susan Callanan, *Physical Therapist Assistant*; 2000

B.S., Iowa State University; D.P.T., Creighton University; additional course work at Iowa State University

Margaret Dunbar, *Associate Degree Nursing*; 1977

Mercy School of Nursing; Iowa 037216; B.A., Metropolitan State University; M.S.N., Clarkson College; R.N.; additional course work at University of Iowa

Jean Evenson, *Associate Degree Nursing*; 1985

R.N., B.S.N., University of Iowa; A.R.N.P., M.S.N., Mankato State University; A-073325; additional course work at Iowa State University, University of Iowa, and Mankato State University

Nancy Frederick, *Associate Degree Nursing*; 1976

B.S.N., Mount Mercy College; Iowa 048580; M.S., Iowa State University; additional course work at University of Iowa, University of Northern Iowa, Marycrest College, and Clarkson College; R.N.

Carol Patnode, *Physical Therapist Assistant*; 1996

A.S., St. Mary's Junior College; P.T.A., Iowa 00463; B.A., Metropolitan State University; M.A., St. Mary's University of MN; additional course work at University of Iowa and University of Northern Iowa

Deb Stockberger, *Medical Assistant Program Leader*; 1997

Diploma, Medical Assistant and A.D.N., North Iowa Area Community College; Iowa 089856; B.S.N., University of Iowa; additional course work at Morningside College, Drake University, and University of Iowa

Deb Wirth, *Practical Nursing*, 1999

A.D.N., North Iowa Area Community College; B.S.N., University of Iowa; additional course work at Iowa State University

Humanities

Jim Zirnhelt, *Division Head*; 1969

Crosier Seminary; B.S. and M.S., Moorhead State University; Ed.D., Nova University; additional course work at University of Iowa, Iowa State University, and University of New Hampshire

Peggy Bang, *Visual Arts*; 1985

B.A., Iowa State University; M.S., Bank Street College of Education in cooperation with Parsons School of Design; Additional course work at Iowa State University, University of Iowa, Marycrest College and School of Visual Arts

Sally Becker, *Writing Lab Specialist*; 1975

Course work at North Iowa Area Community College

Mariestelle Brown, *Communications*; 1967

A.A., North Iowa Area Community College; B.A., University of Northern Iowa; M.A., University of Iowa; additional course work at the University of Iowa and Drake University

Diana Cameron, *Communication Skills*; 1997

B.A., Georgetown College; M.A., Tulane University; M.A., Comparative Literature, University of Chicago; additional course work at Iowa State University.

Joe Davis, *Communication Skills*; 2000

B.A., Mount Mercy College; M.A., Northern Michigan University; additional course work at Iowa State University

Carol Faber, *Visual Arts*; 1991

B.A., Morningside College; M.A., Iowa State University

Nancy Fallis, *Reading and Education Media*; 1998

B.A. and M.A., University of Northern Iowa; additional course work at Mankato State University, University of Iowa, Drake University, and Indiana University

John Groninga, *Communication Skills*; 1985

B.S. and M.A., Iowa State University

John Klemas, *Instrumental Music Director*; 1987

B.M.E. and B.M., Drake University; M.A., Washington State University

Mark Messer, *Composition*; 1988

B.A., Central College; M.A., University of Northern Iowa; additional course work at Iowa State University and Northwest Missouri State University

Paul Nagy, *Communication Skills*; 1972

B.A., Harpur College; M.A., (German) Schiller International University (Heidelberg); M.A. (TEFL) University of Northern Iowa; additional course work at State University of New York at Binghamton, State University College at Potsdam (New York), St. Lawrence University, State University College at Fredonia (New York), and Schiller College (Paris)

Paul Peterson, *Communication Skills/Journalism, LOGOS Advisor*; 1990

B.A. and M.E.A., University of Northern Iowa; additional course work at University of Iowa, University of Northern Iowa, and University of Minnesota

Borden Plunkett, *Communication Skills*; 1993
B.S., Southern Illinois University; M.S., Southern Illinois University

Karen Regal, *Communication Skills*; 1991
B.A., Central College; M.A., Mankato State University; additional course work at University of Iowa, Drake University, and Minnesota State - Mankato

Jayson Ryner, *Vocal Music Instructor/Director*; 2001
A.A., North Iowa Area Community College; B.M.E., University of Northern Iowa; and, M.A., University of Northern Iowa

Charles Schroeder, *Spanish*, 2000.
B.A., University of Northern Iowa; additional course work at Iowa State University

Geraldine Schwarz, *Reading and Literature*; 1986
B.A. and M.A., University of Northern Iowa; additional course work at University of Northern Iowa and University of Iowa

Timothy Slaven, *Speech and Theatre*; 1992
A.A., Iowa Central Community College; B.A., and M.A., University of Northern Iowa

Arlo Stoltenberg, *Communication Skills, Literature*; 1967
B.A., Central College; M.A., Northeast Missouri State University; Ed.D., Nova University; additional course work at Drake University, University of Iowa, University of Northern Iowa, and Iowa State University

Industrial

Gary Forbess, *Division Head/CNC Manufacturing Instructor*; 1997
A.A.S., Madison Area Technical College; B.S., State University of New York; additional course work at the University of Northern Iowa

Gregory Arrowood, *Automotive Services*; 1988
A.A., Iowa Lakes Community College; A.S.E. Certified Master Automobile Technician; additional course work at University of Iowa, University of Northern Iowa, and General Motors Training Center (Ankeny)

Dennis Brunsvold, *Mechanical Design Technology*; 1966
A.A., North Iowa Area Community College; B.T., University of Northern Iowa; additional course work at NSF Institute at the University of Illinois, Iowa State University, and Milwaukee Area Technical College

Robert Carney, *Climate Control*; 1999
A.A., North Iowa Area Community College; B.A. and M.A., University of Northern Iowa

Tom Crowley, *Climate Control*; 1993
Electronics, Austin Vocational Technical Institute; additional course work at Iowa State University

Gary Eckholt, *Manufacturing Technology*; 1997
A.A.S., Kirkwood Community College (CNC), E.M.T.A. License, Northwest Iowa Community College; additional course work at the University of Northern Iowa

Robert Heimbuch, *Automotive Services Technology*; 1999
A.A.S., North Iowa Area Community College, A.S.E. Certified Automobile Technician; additional course work at Iowa State University

Dennis Krauth, *Mechanical Design Technology*; 1999.
A.A.S., Faribault Area Vocational Technical Institute; additional course work at the University of Northern Iowa

Mark Poppe, *Automotive Services*; 1996
B.S., University of Wisconsin-Stout; Associate of Occupation Studies Degree, Universal Technical Institute; additional course work at Northern Arizona University; A.S.E. Certified Master Automobile Technician

Clifford Salmons, *Electronics*; 1981
A.A.S., North Iowa Area Community College; B.A., University of Northern Iowa; U.S. Navy Training Schools; White Motor Corporation Service Schools; M.Ed., Iowa State University

Andrew Wermes, *Building Trades*; 1996
B.A., Golden West College; B.A., California State University; additional course work at Drake University and the University of Northern Iowa

Natural Sciences

Dennis Vrba, *Division Head*; 1987
B.A. and M.A., University of Northern Iowa; additional course work at St. Mary's College, Iowa State University, University of Northern Iowa, and University of Iowa

Adriana Attleson, *Mathematics*; 1985
B.A., University of Northern Iowa; M.A., Iowa State University; additional course work at University of Northern Iowa

David Bernemann, *Engineering/Mathematics*; 1999
B.S., University of Iowa; M.S., West Virginia University; additional course work at Iowa State University

Joseph Chimeno, *Chemistry*, 1996
B.S., Lamar University; M.S., North Texas State University; M.A., University of Idaho; advanced work at Oregon State University, Middle Tennessee State University

Edward Dobrzynski, *Chemistry*; 1986
B.S., Villanova University; Ph.D., Iowa State University; NIH Postdoctoral Fellow, Johns Hopkins University

Patrick Gallart, *Biological Science*; 1993
B.S., Loras College; M.S. and Ph.D., Iowa State University

Caroline Goodman, *Mathematics*; 1995
B.S., Purdue University; M.S., University of Illinois; additional course work at Portland State University and Iowa State University

Brent Hamilton, *Mathematics*; 1998
B.S., University of Dubuque; M.S., Iowa State University

Paul Hertz, *Mathematics*; 1998

B.S., Mankato State University; M.S., Iowa State University

Ronald Jenkins, *Biological Science*; 1967

B.A., William Penn College; M.A., State University of South Dakota; additional course work at Oklahoma State University, Texas A&M University, Northwestern State College, and Drake University

Mark Kabele, *Natural Science Associate*, 1998

B.S., University of Wisconsin; additional course work at North Iowa Area Community College

Rachel Lamp, *Mathematics*; 1990

B.A., Marycrest College; M.S., Iowa State University; additional course work at the University of Iowa and St. Ambrose University

Kristin Mandsager, *Physical Science*; 1992

B.A., St. Olaf College; M.A., University of Northern Iowa; additional course work at Iowa State University

Paul Pistek, *Biological Science*; 1996

B.S. and M.S., Iowa State University

Kathy Rogotzke, *Mathematics*; 1994

B.A., St. Olaf College; M.A., Iowa State University; additional course work at North Iowa Area Community College and Kansas State University

Carol Schutte, *Biological Science*; 1987

B.S. and M.S., Iowa State University; additional course work at University of Illinois, St. Mary's College, University of Iowa, and University of Northern Iowa

Jason Stecklein, *Physics*; 2000

B.S. Loras College; M.S., Iowa State University

Lisa Steiff, *Natural Science Secretarial Associate*; 1999

MCSE Certification, Hamilton College; A.A., Waldorf College; additional course work at Mankato State University

Mary Thede, *Mathematics*; 1989

B.A., Parsons College; M.S., Drake University; additional course work at Marycrest, Iowa State University, Kansas State, and University of Iowa

Craig Zoellner, *Biological Science*; 1992

B.A., Wartburg College; M.A., University of Northern Iowa; additional course work at University of Iowa, Iowa State University, Carleton College, University of Illinois, and Northwest Missouri State

Social Sciences**Jim Zirnhelt**, *Division Head*; 1969

Crosier Seminary; B.S. and M.S., Moorhead State University; Ed.D., Nova University; additional course work at University of Iowa, Iowa State University, and University of New Hampshire

John Brietzke, *Economics*; 1980

B.S., University of Minnesota; M.B.A., University of Wisconsin; additional course work at University of Minnesota, University of Iowa, and Iowa State University

Patricia Crowe, *Psychology*; 1996

B.A., University of Northern Iowa; M.A., Bowling Green State University; additional course work at Bowling Green State University and the University of Iowa

Helen Karamitros, *Sociology*; 1994

A.A., North Iowa Area Community College; B.A. and M.A., University of Northern Iowa, M.A., Mankato State University; additional course work at Keene State College, NH, University of Northern Iowa, and Iowa State University

Steven Long, *Sociology/Marriage & Family*; 1990

B.A. and M.A., University of South Dakota; additional course work at Kearney State College (Nebraska)

Joseph (Fred) McCurnin, *Economics*; 1990

B.A., Augustana College; M.A., University of South Dakota; additional course work at North Dakota State University and University of Pennsylvania

Tom Oswald, *Education*; 1990

B.A., Luther College; M.A., University of Northern Iowa; additional course work at University of South Dakota, University of Iowa, and University of Oregon

Jeffrey Pilz, *American History*; 1993

B.S., University of Wisconsin at Stevens Point; M.A. and Ph.D., University of Minnesota

Jeff Platt, *Psychology*; 1997

B.A., St. Ambrose University; M.S., Iowa State University; additional course work at Iowa State University, University of Iowa, and University of Northern Iowa

John Schmaltz, *Government and History*; 1988

B.S., Minot State University; M.S., Southern Illinois University-Edwardsville; additional course work at Arizona State University; University of Nebraska, George Washington University, State University of New York at Stony Brook, University of Northern Iowa, Kearney State College, Wayne State College, Marycrest College, and Drake University

Michael Thede, *Geography and Western Civilization*; 1988

B.A., Parsons College; M.A., Northeast Missouri State University; Ph.D., University of South Florida; additional course work at Drake University, McGill University, Ohio State University, Bowling Green State University, and University of Iowa

Continuing Education

John Schladweiler, *Dean*; 1990
B.S., South Dakota State University; M.B.A., Mankato State University; additional course work at University of Iowa

Rita Foley, *Office Manager*; 1991
Course work at North Iowa Area Community College and Iowa State University

Jennifer Bergman, *Secretary*; 2000
Diploma, North Iowa Area Community College

Cheryl Christians, *Secretary*; 1997
A.A., North Iowa Area Community College

Kathy Clemens, *Secretary*; 1993
Course work at Northwestern College

Pat O'Banion, *Secretary*; 1975
Diploma, Hamilton Business College; additional course work at North Iowa Area Community College, Breech Academy, and Mid-Continent Regional Training Center

Community Education

Barb Eisenmenger, *Garner Community Education Coordinator*; 1989
B.A., Buena Vista University; M.S., Iowa State University

Constance Glandon, *Charles City/Osage Community Education Coordinator*; 2000
B.A., Wartburg College

Kathy Millard, *Lake Mills Community Education Coordinator*; 1983
A.A., North Iowa Area Community College; B.A., University of Northern Iowa

Lana Miller, *Charles City Center Secretary*; 1986
Course work at North Iowa Area Community College

Regional Health Education Center

Marge Wasicek, *Director*; 1969
R.N., St. Mary's School of Nursing, R.N., Iowa; B.S.N., University of Dubuque; M.S., Iowa State University; additional course work at University of Iowa

Training & Development

William Burdick, *Management and Professional Development Coordinator*; 2000
B.S., Drake University

Jody East, *Economic Development Training Coordinator*; 1992
B.S., Iowa State University; M.S., Drake University; and Jonah, the Goldratt Institute

Mary Nell Fullerton, *Computer Education Coordinator*; 2001
A.A., Austin Community College; B.S., Buena Vista College

Elizabeth Gales, *Director of Business Leadership and Cultural Events*; 1990
B.A., College of St. Catherine

John Sjolinder, *Trade and Industry Coordinator*; 2000
A.A.S., North Iowa Area Community College; B.S., Iowa State University

Developmental Education

Ann-Morrison (Tucki) Folkers, *Director*; 1976
B.A., University of Iowa; M.S., Iowa State University; Developmental Education Certification, Appalachian State University

Jeanette Armstrong, *Student Learning Center Secretary*; 1989
A.S.B. and A.A., North Iowa Area Community College; additional course work at University of Iowa

Kay Haugen, *Student Learning Center Associate*; 1978
Diploma, North Iowa Area Community College

Marty Lundberg, *ABE/Basic Skills Coordinator*; 1989
B.A., University of Iowa; M.S., Iowa State University; additional course work at University of Northern Iowa, University of Iowa, and Iowa State University

Mary Miller, *Student Learning Center Associate*; 1990
Course work at University of Northern Iowa

Lori Quinlin, *Student Learning Center Instructor*; 1985
B.A., University of Northern Iowa; M.S., Iowa State University; additional course work at Drake University

Karmen Shriver, *ABE/Literacy Coordinator*; 1989
B.A., University of Iowa; M.S., Iowa State University; additional course work at University of Northern Iowa

Deborah Sykes, *Lead Instructor-New Horizons Alternative High School*; 1997
B.S., Northwest Missouri State University

Lee Weber, *Student Learning Center Instructor (P/T)*; 1996
A.A., North Iowa Area Community College; B.A., University of Northern Iowa; M.B.A., University of Minnesota; additional course work at Mankato State University

Learning Services

Don Kamps, *Learning Services Director and Evening Dean*; 1972
B.S., Mankato State University; M.A. and Ph.D., University of Iowa

Karen Dole, *Librarian*; 1980
B.A. and M.A., University of Northern Iowa; additional course work at Morningside College, Iowa State University, Drake, and University of Iowa

Cindy Eyberg, *Library Interlibrary Loan/Government Documents Assistant*; 1999
Course work at North Iowa Area Community College

Kim Kraus, *Library Circulation Assistant*; 1984
Clerical diploma, Hamilton Business College; additional course work at North Iowa Area Community College

Joyce Navratil, *Library Associate*; 1994
A.A., North Iowa Area Community College

Angie Schaper, *Associate Librarian*; 1998
B.A., University of Northern Iowa; M.A., University of Iowa; additional course work at the University of Iowa

Tech Prep

Nelson Crabb, *Director; Secondary Career Programs*; 1994
B.S., Iowa Wesleyan College; M.S., Iowa State University; additional course work at Iowa State University

Fran DeGroot, *Tech Prep Coordinator*; 1998
B.A., University of Northern Iowa; additional course work at Iowa State University

Jean Ostrander, *Tech Prep Coordinator*; 1993
B.A., University of Iowa; M.S., Iowa State University

Ann Fisher, *Secretary*; 1994
A.A. and A.S., North Iowa Area Community College

ADMINISTRATIVE SERVICES

Sandra Gobeli, *Vice President for Administrative Services*; 1979
A.A., North Iowa Area Community College; Graduate, Hamilton Business College; B.A., Buena Vista University; M.B.A., Drake University

Mary Cole, *Administrative Services Office Manager*; 1988
Diploma, American Institute of Business; additional course work at Des Moines Area Community College

Denise Brooks, *Secretary/Receptionist*; 1987
Diploma, Hamilton Business College

Cheryl (Buffie) Ohden, *Copy Center Supervisor*; 1972
Diploma, Hamilton Business College

Jennifer Patterson, *Business Office Clerk/Administrative Services Secretary*; 2000
A.A.S., North Iowa Area Community College; additional course work at Buena Vista University

Suzanne Quam, *Secretary*; 1999

Auditorium

Timothy Slaven, *Manager*; 1992
A.A., Iowa Central Community College; B.A. and M.A., University of Northern Iowa

Jerry White, *Auditorium Technician*; 1980

Business Office

Kathy Grove, *Accountant/Business Office Manager*; 1977
A.A., North Iowa Area Community College; additional course work at Iowa State University

Tanya Dadisman, *Accounts Receivable Clerk*; 1998
A.A., North Iowa Area Community College; B.A., University of Northern Iowa

Mindy Eastman, *Accounting Technician*; 1990
A.A., North Iowa Area Community College; additional course work at Buena Vista University

Beth Forbes, *Payroll Clerk/Bookkeeper*; 1977
A.A., North Iowa Area Community College.; additional course work at University of Northern Iowa

Tammy Hain, *Financial Aid/Bookkeeper*; 1985
A.A., North Iowa Area Community College

Valerie Harper, *Accounts Payable Clerk*; 1989
A.S.B., Accounting Diploma, Accounting Clerk Diploma, North Iowa Area Community College

Rhonda Nesheim, *Bookkeeper/Secretary*; 1996
A.S.B., North Iowa Area Community College

Jennifer Patterson, *Business Office Clerk/Administrative Services Secretary*; 2000
A.A.S., North Iowa Area Community College; additional course work at Buena Vista University

Krystal Straughn, *Business Office Clerk*; 1998
Accounting Clerk with Computers Diploma and A.S.B., North Iowa Area Community College

Human Resources

Shelly Schmit, *Director of Human Resources*; 1998
A.A., Des Moines Area Community College; B.S., Iowa State University; additional course work at Iowa State University

Tammie (T.J.) Hirv, *Secretary*; 1991
A.S.B. and A.A., North Iowa Area Community College; additional course work at University of Northern Iowa, University of Iowa, and Buena Vista University

Physical Plant

Tony Pappas, *Director, Physical Plant*; 1983
Licensed Master Electrician — International Brotherhood of Electrical Workers; A.A., North Iowa Area Community College; additional course work at Iowa State University

Mitchell Olson, *Supervisor of Buildings*; 1995
A.A.S., Climate Control Technology

Don Smith, *Supervisor of Custodial*; 1992
Journeyman Electrician, I.B.E.W., A.A., North Iowa Area Community College; additional course work at North Iowa Area Community College

Bill Baylor, *Event Coordinator*; 1994
Journeyman Electrician, I.B.E.W.; additional course work at North Iowa Area Community College

Bill Beach, *Residence Hall Custodian*; 1981

Joe Borger, *Building Maintenance*; 1987

Melvin Brady, *Custodian*; 1990

Loy Conn, *Building Maintenance*; 1985
Course work at Iowa State University

Delmer Daniels, *Custodian*; 1999
Course work at Ellsworth Community College

Bill Dunn, *Custodian*; 1986
Course work at Hawkeye Institute of Technology

Stanley Emerson, *Grounds Maintenance*; 1984
Course work at North Iowa Area Community College

Dennis Felland, *Custodian*; 1995
Course work at Mesa Community College and Arizona State University

Kathy Foster, *Facilities Secretary*; 1998
A.A., North Iowa Area Community College

Ron Graf, *Custodian*; 2001

Phyllis Lauer, *Custodian*; 1997
Certificate, Hibbing Junior College; additional course work at University of Minnesota, Palomar Junior College and North Iowa Area Community College

June Lauritson, *Custodian*; 2000

Gary Loftis, *Automotive Maintenance*; 2000
Diploma, University Trade Schools

Tim Meyer, *Custodian - Team Leader*; 1998

Mike Norcross, *Custodian*; 1999

Kevin Petersen, *Building Maintenance*; 2001
A.A., North Iowa Area Community College; B.S., Northwest Missouri State University; course work at Waldorf College

Alvin Reiter, *Residence Hall Custodian*; 1977

Kay Schumaker, *Residence Hall Custodian*; 1991

Rusty Seidel, *Grounds Maintenance*; 1984
A.A., North Iowa Area Community College

Michael Shea, *Custodian*; 2001

Duane Teska, *Custodian*; 1999

Cheryl West, *Building Maintenance*; 1976

Timothy Winter, *Technician*; 1999
Course work at North Iowa Area Community College

INSTITUTIONAL ADVANCEMENT

Tammy Hove, *Director of Institutional Advancement*; 1989

A.A., North Iowa Area Community College; B.A. and M.B.A., University of Iowa

Monica Burchett, *Community Relations Coordinator*; 2000
B.A., Iowa State University

Dana Heimbuch, *Secretary/Administrative Assistant*; 1998

A.S.B., North Iowa Area Community College

Linda Rourick, *Campus Facility/ICN Scheduler*; 1994
B.S., Iowa State University

Cinda Rustad, *Interim Foundation Director*; 1990
Diploma, Hamilton Business College

Deb Smith, *Campus Facility/ICN Scheduler (P/T)*; 1997

Diploma, North Iowa Area Community College

Kevin Suhr, *Web and Multimedia Specialist*; 2001
B.A., Briar Cliff College

James Zach, *Graphic Designer*; 1995
A.A., North Iowa Area Community College; B.A., Iowa State University

JOHN PAPPAJOHN BUSINESS AND ENTREPRENEURIAL CENTER

Douglas Morse, *Director*; 1999
B.A., Luther College; M.A., University of Iowa; M.B.A., University of Iowa

Christine Nonnweiler, *Administrative Assistant/Secretary*; 1999
Diploma, Spencer School of Business; B.A., Buena Vista University; additional course work at Iowa State University

Tim Putnam, *Entrepreneurship Client Manager*; 2000
B.S., Kansas State University

Small Business Development Center

Richard Petersen, *Director of Small Business Development Center*; 1985
B.S., Northwest Missouri State University

STUDENT SERVICES

Karen Pierson, *Vice President for Student Services*; 1996

B.S., Northwest Missouri State University; M.S., University of Nebraska; Ph.D., Iowa State University

Janice Christensen, *Office Manager*; 1969

Admissions

Rachel McGuire, *Director of Admissions*; 1993

A.A., North Iowa Area Community College; B.A., University of Northern Iowa; M.F.C.S., Iowa State University; additional course work at Mankato State University

Shawn Faust, *Enrollment Specialist*; 1999

B.A., Iowa State University; additional course work at Buena Vista University

Sandra Harrington, *Secretary*; 1981

Diploma, North Iowa Area Community College

Jason Hoenshell, *International Recruiter*; 2000

B.S., Bartlesville Wesleyan College

Steven Krafcsin, *Enrollment Specialist*; 1997

B.S., University of Iowa; additional course work at University of North Carolina, Iowa State University, and Loras College

Karla Swanson, *Enrollment Specialist*; 1994

A.A., North Iowa Area Community College; B.A., Buena Vista University; additional course work at Drake University

Athletics

Ryan McGuire, *Director of Athletics*; 2001

A.A., Black Hawk College; B.A., University of Northern Iowa; M.S., Iowa State University

Jody Fink, *Secretary*; 1985

A.S.B., North Iowa Area Community College

Jason Hoenshell, *Soccer Coach/Intramural Coordinator*; 2000

B.S., Bartlesville Wesleyan College

Steven Krafcsin, *Head Men's Basketball Coach*; 1997

B.S., University of Iowa; additional course work at University of North Carolina, Iowa State University, and Loras College

Rachel McGuire, *Head Volleyball Coach*; 1999

A.A., North Iowa Area Community College; B.A., University of Northern Iowa; M.F.C.S., Iowa State University; additional course work at Mankato State University

John Oertel, *Head Women's Basketball Coach, Assistant Football Coach*; 1984

A.A., North Iowa Area Community College; B.S., Iowa State University; M.A., University of Iowa

Richard Ramsey, *Head Football Coach*; 1984

B.S., Peru State College; M.S., Northwest Missouri State University; additional course work at Wayne State College, Kearney State College, and Iowa State University

Counseling/Academic Advising

Angie DeVries, *Secretary*; 1998

A.S.B., North Iowa Area Community College

Kay Field, *Counselor/Cooperative Education*; 1990

A.A., Rochester Junior College; B.S., St. Cloud State University; M.Ed., Iowa State University; additional course work at Drake University and Marycrest College

Trudy LaBarr, *Counselor*; 1998

B.S.E., Arkansas State University; M.R.C., Arkansas State University; Ed.S., Arkansas State University; additional course work at Peabody College and Vanderbilt University

Jonnie Webster, *Counselor*; 1996

B.A., University of Northern Iowa; M.A.E., University of Northern Iowa; additional course work at University of Iowa

Housing

Richard Ramsey, *Director of Housing*; 1984

B.S., Peru State College; M.S., Northwest Missouri State University

Mitzi DeGroot, *Housing Security*; 1997

A.A., Ellsworth Community College; B.A., University of Northern Iowa

Catherine Fields, *Housing Head Resident/Student Senate Advisor*; 2001

B.A., Southwest State University

Lynn Huber, *Housing Security*; 1997

B.S., Southwest Baptist University; additional course work at Iowa Lakes Community College, Northwestern State University of Louisiana, and Grandview College

Sherry Zuke, *Housing Secretary*; 1978

A.A., North Iowa Area Community College; additional course work at University of Iowa

Registration and Financial Aid

Larry Mozack, *Registrar*; 1974

A.A., North Iowa Area Community College; B.A., University of Northern Iowa; additional course work at Iowa State University

Mary Wendt, *Assistant Registrar/Records Office Manager*; 1976

A.A., North Iowa Area Community College

Mary Bloomingdale, *Director of Financial Aid*; 1991

B.A., University of Iowa

Michelle Petznick, *Associate Director of Financial Aid*; 1996

A.A., North Iowa Area Community College; B.A., University of Northern Iowa

Carla Alexander, *Financial Aid Secretary*; 1995
Course work at University of Missouri

Christine Rimrod, *Financial Aid/Records Office Secretary*; 1999

A.S., North Iowa Area Community College

Maryls Katuin, *Records Office Secretary*; 1979
Diploma, North Iowa Area Community College

Jacki Lowe, *Financial Aid Secretary*; 1999
Course work at North Iowa Area Community College

Sherrie Woods, *Records Office Secretary*; 1998
Diploma, North Iowa Area Community College

Student Support Services Project

Terri Bonner Ewers, *Director of Student Support Services Project*; 1988

A.A., North Iowa Area Community College; B.A., University of Northern Iowa; M.S., Iowa State University; L.M.S.W.; additional course work at Marycrest College, University of Iowa, and Iowa State University

Jennifer Aydelotte, *Secretary*; 1998
Course work at North Iowa Area Community College

Jessica Putnam, *Tutor Coordinator/Instructor*; 1988
B.A., University of Northern Iowa; additional course work at the University of Northern Iowa, Marycrest College, Drake University, Iowa State University, and University of Iowa

Marilyn Smith, *Counselor*; 1994
B.S., Iowa State University; M.A.E., University of Northern Iowa; L.M.S.W.; additional course work at Northern Illinois University, Drake University, Iowa State University, and University of Iowa

Vocational Rehabilitation

Steve J. Faulkner, *Rehabilitation Counselor*; 1989
B.A., Augustana; D.D.S., University of Iowa; M.A., University of Iowa

Dixie A. Holmes, *Secretary*; 1985
Diploma, American Institute of Business; additional course work at North Iowa Area Community College and Waldorf College

TECHNOLOGY SERVICES

Mark Greenwood, *Director of Technology Services*; 1989
B.A., Central College

Steven Bendickson, *Computer Technician*; 1997

Diane Bissig, *Writing Analysis System Administrator/Programmer-Analyst*; 1995
Diploma, Indian Hills Community College

Brian Charlton, *Computer Lab Technician Supervisor*; 1999
A.A.S. Degree, Hamilton Business College; A.A. Degree, Iowa Central Community College

Jim Degen, *Applications Programmer/Network Manager*; 1989
A.A., North Iowa Area Community College; B.S., Iowa State University; additional course work at North Iowa Area Community College

Alan Haight, *Media Technician*; 2000
AST, United Electronics Institute

Judith Henry, *Systems Administrator/Programmer-Analyst*; 1999
B.A., University of Iowa; additional course work at Rochester Institute of Technology, IBM, and Oklahoma State University

Carol Janssen, *Help Desk/Media Support Technician*; 2000
Diploma, American Institute of Commerce

Dennis Klemas, *Computer Technician*; 1998
A.A.S., North Iowa Area Community College

Merlin Klemmer, *Computer Technician*; 1999
Graduate, DeVry Technical Institute; Graduate, Brown Institute; Course work at Benchmark Network Systems

Bruce McKee, *Instructional Technology Coordinator*; 1991
B.F.A., University of Minnesota; M.A., University of Northern Iowa

Lois Spieker, *Computer Operator*; 1989
A.A., North Iowa Area Community College

WORKFORCE DEVELOPMENT PARTNERSHIP

Nancy Bair, *Regional Director*; 1990
B.A., University of Iowa; additional course work at Marycrest University and Drake University

Jennifer Kammeyer, *Executive Officer*; 1998
A.S.B. and A.A., North Iowa Area Community College; B.A., Buena Vista University

Donna Petersen, *Office Manager*; 1983

Cynthia Abben, *MIS Specialist*; 1976
Diploma, Hamilton Business College

Economic Development

Terry Schumaker, *Director of Economic Development/Special Projects*; 2000
A.A., North Iowa Area Community College; B.A., Minnesota State University

North Iowa Career Center

Kim Caponi, *Director*, 1997
B.A., Union College.

Susan Steig, *Secretary*; 1978
Diploma, North Iowa Area Community College

PROMISE JOBS/Welfare-to-Work

Molly Anderegg, *Workforce Advisor*; 2000
B.A., University of Iowa

Marti Friest, *Life Skills Liaison*, 1992
A.A., North Iowa Area Community College; B.A., University of Northern Iowa; additional course work at University of Northern Iowa

Bonnie Glidden, *Workforce Advisor*; 2000
A.A., North Iowa Area Community College; B.S., Mankato State University

Judith Lickteig, *Workforce Advisor*; 1999
L.P.N., North Iowa Area Community College

Jerold Magnuson, *Workforce Advisor*; 1998
A.S., New England Institute of Technology; A.A., North Iowa Area Community College; B.A., Buena Vista University

Duane Meyer, *Workforce Advisor*; 1986
A.A., North Iowa Area Community College; B.A., University of Northern Iowa; additional course work at Iowa State University and University of Northern Iowa

Mary Wallace-Brown, *Iowa Volunteer Mentor Program Coordinator*, 1998
A.A., Indian Hills Community College; B.A., Buena Vista University

Heather Wright, *Workforce Advisor*; 2000
B.A. University of Northern Iowa

Workforce Investment Act

Mickey Funkhouser, *Employment Training Specialist*; 1991
B.A., University of Iowa; additional course work at University of South Dakota, University of Northern Iowa, and Marycrest College

Janice Grandstaff, *Employment Training Specialist*; 1983
B.A., University of Northern Iowa

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