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2008-2009 College **Catalog**

NORTHEAST IOWA COMMUNITY COLLEGE

Fall Semester 2008

August 21	Semester Begins
September 1	No Classes - Holiday
October 17 - 20	No Classes - Fall Break
November 17	Last Day to Withdraw
November 26 - 30	No Classes - Holiday
December 18	Semester Ends

Winterim 2008 - 2009

December 22, 23, 29 and 30 | January 5, 7 and 9

Spring Semester 2009

January 12	Semester Begins
March 8 - 15	No Classes - Spring Break
April 10 - 13	No Classes
April 14	Last Day to Withdraw
April 21	No Classes - All College Day
May 13	Semester Ends

Summer Term 2009

May 19	Term Begins
May 23 -25	No Classes - Holiday
July 3 - 5	No Classes - Holiday
July 22	Last Day to Withdraw
August 12	Term Ends

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College **Catalog**

Calmar Campus
PO Box 400
Calmar, IA 52132-0400
563.562.3263
800.728.2256
fax: 563.562.3719

Peosta Campus
10250 Sundown Road
Peosta, IA 52068-9703
563.556.5110
800.728.7367
fax: 563.556.5058

Chickasaw County Center
951 North Linn Avenue, Suite 6
New Hampton, Iowa 50659-1203
641.394.4689
fax: 641.394.6909

Cresco Center
1020 - 2nd Avenue Southeast
Highway 9
Cresco, Iowa 52136-1710
563.547.3355
fax: 563.547.3402

Delaware County Center
Professional Building
223 West Main Street
Manchester, Iowa 52057-1547
563.927.6387
fax: 563.927.6534

Dubuque Center
700 Main Street
Dubuque, Iowa 52001-6820
563.557.8271
fax: 563.557.8353

Regional Academy for Math and Science (RAMS) & Oelwein Center
(Opening Fall 2008)
located on Hwy 150 South
Oelwein, Iowa 50662-2501
319.283.3010
fax: 319.283.3010

Town Clock Center for Professional Development
680 Main Street
Dubuque, Iowa 52001-6818
888.642.2338
fax: 563.557.0319

Waukon Center
1220 3rd Avenue NW, Suite 102
Waukon, Iowa 52172
563.568.3060
fax: 563.568.0016

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Contents

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Welcome **to NICC**

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2008-2009

THIS IS YOUR COLLEGE.....AND PLEASE DON'T FORGET IT!

Dear New Colleague!

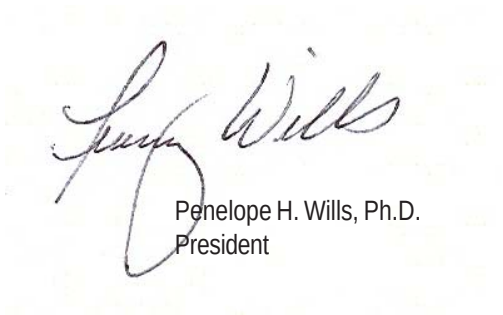
Yes, I really do mean Colleague! Thank you for choosing to join us at NICC as you pursue this next chapter in your educational career. We, at NICC, are very serious about engagement in your learning. If we were to simply describe you only as a student, it would appear that you may not be responsible for your learning and development. Nothing could be further from the truth! We as educators, whether as staff or your faculty, work with you to open doors for your success.

We see you as colleagues in many ways. As members of this learning community, you and I both need to seek opportunities to continue to expand our knowledge of the world. All members of our college community are committed to our own professional development so that you have the best learning environment available to you.

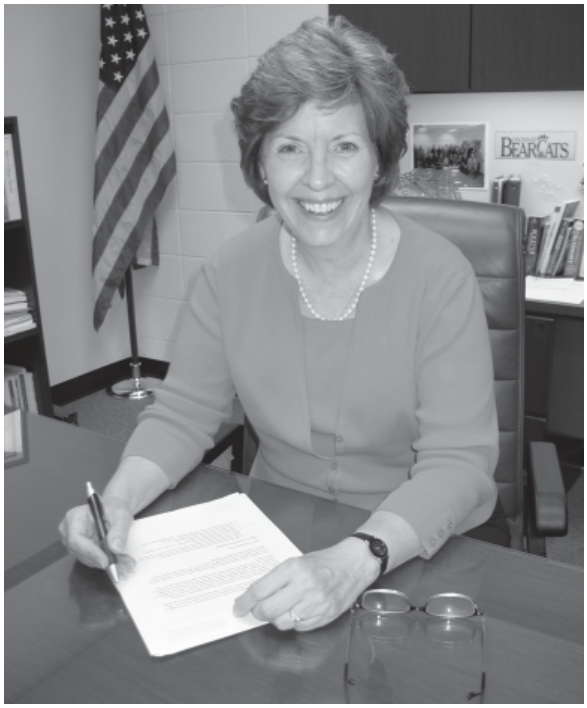
Another example of our respect for your engagement is student membership in our new College Senate. Very few colleges in the nation invite students to serve on such a governance body. Your voice is important to all of us at NICC. As a colleague, you will have opportunities to develop your knowledge and talents both inside and outside the classroom. Our student social, professional, and honor organizations give you ample experience to refine your leadership skills and apply the academic knowledge you will garner in your classes.

In selecting NICC, you are joining an academic community which continuously earns the respect of its constituents for excellence. The overwhelming positive response of our voters to our recent $35 million bond levy is indicative of this trust. Our communities believe in you and want you to have the best facilities and equipment for your learning. In the next few years, you will see major renovations and new construction throughout our College. Any construction inconvenience will be temporary and definitely worth your patience.

So colleague, please join me, your faculty, and fellow staff members in making a difference in our world of today and the future. We're committed to making these next few years the best for you. Let me know your thoughts, ideas, and opinions about your NICC experience. Stop by my office, call me (x201), or email me (willsp@nicc.edu) and introduce yourself. I welcome the opportunity to personally get to know my new colleague!



Penelope H. Wills, Ph.D.
President



Accreditation

Northeast Iowa Community College is a public community college approved by the State Board of Education.

The curricula are approved by the State Board of Education and the Veteran's Education Unit of the State Department of Education for the Veteran's Administration.

Northeast Iowa Community College is accredited by the North Central Association of Colleges and Schools:

North Central Association of Colleges and Schools
Commission on Institutions of Higher Education
30 North LaSalle Street, Suite 2400
Chicago, Illinois 60602-2504
(800) 621-7440 or (312) 263-0456

Please see individual programs for listings of specialty accreditations.

Board of Trustees

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NICC Is Student Driven And Community Focused

Northeast Iowa Community College provides accessible, affordable, quality education and training to meet the needs of our communities.

College Vision

The NICC educational community will live the values of service, respect, innovation, stewardship, and integrity within a culture of continuous improvement.

Service: Dedication to meet the ever-changing educational needs of our stakeholders

Respect: Recognition of individual dignity by promoting trust and cooperation

Innovation: An open climate fostering collaboration, improvement, and the advancement of ideas

Stewardship: Responsible management that sustains resources for the common good

Integrity: Policies, practices, and actions reflecting responsible citizenship

Our Seven Goals

1. Student Access and Success: NICC values access and success for all students.

2. Teaching Excellence and Innovation: NICC provides an educational environment that values teaching excellence and innovation.

3. Partnerships and Collaborations: NICC values its existing community, business, and educational partnerships and strives to establish new partnerships that are mutually beneficial for students, College employees, partners, and communities.

4. Planning and Continuous Improvement: NICC engages in ongoing planning and assessment aimed at the continued excellence of educational and training programs and support services.

5. College Environment and Diversity: NICC encourages an environment that promotes collaboration and a culture that is open, inquisitive, positive, and focused on success in all endeavors.

6. Fiscal Management and Resource Development: NICC maximizes the use of revenue from all available sources to support College programs and services.

7. Instructional and Institutional Technology: NICC provides a robust and responsive system of technology that supports all aspects of the institution to its students, College employees, and communities.

Statement of Non-Discrimination

Northeast Iowa Community College prohibits discrimination in educational programs, employment, and activities on the basis of age, race, creed, color, sex, sexual orientation, gender identity, national origin, religion, or disability as required by the 1964 Civil Rights Act, Titles VI and VII; the Age Discrimination in Employment Act of 1967 (ADEA); the 1972 Education Amendments, Title IX; the Federal Rehabilitation Act of 1973, Section 501 and 505; the Americans with Disabilities Act (ADA), Titles I and V; the Civil Rights Act of 1991, and the Iowa Code, Chapter 216.

It is also the policy of this District that the curriculum content and instructional materials utilized reflect the cultural and racial diversity present in the United States and variety of careers, roles, and lifestyles open to women as well as men in our society. One of the objectives of the total curriculum and teaching strategies is to reduce stereotyping and to eliminate bias on the basis of age, race, creed, color, sex, sexual orientation, gender identity, national origin, religion, or disability. The curriculum should foster respect and appreciation for cultural diversity found in our country and an awareness of the rights, duties, and responsibilities of each individual as a member of a pluralistic society.

Inquiries and grievances regarding compliance with applicable state and federal laws may be directed to the Director of Human Resources, P.O. Box 400, Calmar, Iowa 52132, or to the Director of the Iowa Civil Rights Commission, Des Moines, Iowa, or to the Director of the Region VII Office of Civil Rights, Department of Education, Kansas City, Missouri.

NICC's History

Thousands of people have chosen NICC as their place to prepare for careers since 1966 when the State Board of Education officially approved the formation of the Area One Vocational-Technical School district, with Calmar as its administrative headquarters. The merged area included the public school districts in Allamakee, Chickasaw, Clayton, Fayette, Howard, and Winneshiek counties and sections of Bremer, Buchanan, and Mitchell counties. In 1970, the merged area was enlarged to include public school districts in Dubuque and Delaware counties and sections of Jones and Jackson counties.

Career education programs were offered for the first time in 1967 with 170 students enrolled in 12 programs. Construction of classroom facilities began in 1967 on the 210-acre campus on the south edge of Calmar. The Calmar Campus now includes eight buildings: Darwin L. Schrage Administration, Max Clark Hall, Wilder Learning Resource Center, Industrial Technologies, Student Union, Agricultural Technologies, the Child Development Center, and the Northeast Iowa Community-based Dairy Center. Built in 2000, this $4.1 million dairy education center and applied research laboratory is part of the state's effort to promote value-added agriculture.

Career and adult education programs began in Dubuque in 1971, in what is now Cycare Plaza, as well as several other locations scattered throughout the city. A new campus was started in 1979 at Peosta where most services are located in one building, with the exception of the Child Development Center. In 1997, the college formed a partnership with the National Safety Council to construct and operate the National Education Center for Agricultural Safety (NECAS), opening a national training center dedicated to lowering the level of accidents in agriculture. Most recently, the college built a new separate building to house the carpentry/construction program and the new gas utilities program.

NICC became a community college in 1988 and is authorized by the Iowa Board of Education to award the Associate in Arts, Associate in Science, and Associate in Applied Science degree as well as diplomas and certificates. Since then, the college has continued to evolve. It has expanded to include NICC Centers in Cresco, Dubuque, Manchester, New Hampton, Oelwein, and its newest Center in Waukon. The purpose of the centers is to bring education and training to the people where they live and to serve as a catalyst for economic development. Some centers have additional foci to serve their communities. In the summer of 2008, the Oelwein Center will move to the new facilities for the Regional Academy for Math and Science (RAMS). RAMS is the first such program of its type in the State of Iowa. Likewise, one of the Centers in Dubuque, the Town Clock Center for Professional Development, will be expanded (summer '08) to include a state-of-the-art one-stop center which is a partnership with Iowa Workforce Development (IWD) and East Central Intergovernmental Association (ECIA).

In December of 2007, the district overwhelmingly approved a $35 million bond levy for NICC. This was a first such levy for the college. These funds are to support significant renovation and construction of facilities on both campuses to enhance student learning.

Degree & **Diploma Requirements**

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Degree and Diploma Requirements

NICC offers three associate degrees designed for transferring to another college or university:

- Associate in Arts degree (AA)
- Associate in Science degree (AS)
- Associate in Science/Career Option degree (AS/CO)

Within the Associate in Arts degree and Associate in Science degrees, you may choose the general AA or AS degree or from several options. The college also offers the Associate in Applied Science degree, which is designed primarily to prepare graduates for immediate employment. In some instances, select AAS majors (or portions thereof) may be transferable to four-year institutions.

In addition to being properly registered, you are responsible for knowing the requirements for the degree you plan to obtain and for planning your schedule to meet those requirements. If you plan to transfer community college credit to a four-year college, you should select courses to conform with requirements of the particular institution to which you intend to transfer. Consult your advisor any time you have doubts about course selection.

General Degree Requirements

1. A minimum of 64 credit hours.
2. A 2.0 cumulative grade point average and a passing grade in all required courses.
3. At least 18 credit hours must be earned at NICC. Individual departments may require specific courses to meet this requirement.
4. Demonstrated computer literacy is a requirement for graduation.This requirement may be met with SDV:200 Introduction to Microcomputers or its equivalent as prescribed by specific majors.

General Education Requirements

Broadening an individual's knowledge and understanding of the world has long been an objective of higher education. General education at NICC is designed to provide learning experiences that prepare you to assume a productive role as a citizen, to understand and function successfully in the modern world, and to prepare for lifelong learning. General education will provide breadth to the college learning experience and assist you in acquiring general knowledge, skills, insights, and sensitivity needed to function as an educated person in the contemporary world.

Philosophy Statement for General Education

NICC degree and diploma graduates should possess the knowledge, skills, and attitudes necessary to successfully function as members of society. The college affirms that general education imparts foundational knowledge, concepts, and attitudes that every educated person should possess; and that general education is a part of each degree student's course of study regardless of area of emphasis.

Education at NICC offers all students the opportunity and encouragement to become competent, responsible individuals with the ability to adapt to a changing workplace and to understand the importance of lifelong learning. Through a variety of teaching strategies, NICC's faculty and staff assist students in acquiring the general and specific skills essential for success in work, career, and life.

Proficiency in the following objectives is gained cumulatively and requires both recursive and diversified learning opportunities. Differences in course content and presentation will provide different specific experiences while integrating these themes.

- Develop and utilize effective communication skills.
- Understand various cultures and their interrelationships.
- Locate, interpret and use information.
- Develop an understanding of self as well as acquire effective interpersonal skills.
- Exercise critical thinking.
- Recognize the dignity and worth of the individual, explore moral issues, and make ethical decisions.
- Be able to understand and apply the basic principles of math, science, and technology.
- Acknowledge the richness that literature, history and the arts have contributed to human life.
- Recognize the value of lifelong learning.
- Value wellness for self and others.
- Demonstrate specific skills as members of a highly technical, self-disciplined, productive, and quality-oriented work force.
- Successfully evaluate and adapt to technological and social changes to meet the expanding needs of industry and business in a global marketplace.

Since course requirements differ for respective associate degrees offered by the college, and since individual students may elect particular courses that satisfy their unique needs, students acquire this foundation in general education in varying ways and to varying degrees.

Associate in Arts Degree (AA)

The Associate in Arts Degree program provides a course of study which, if satisfactorily completed, will readily transfer to most colleges and universities. College parallel-transfer curricula permit completion of the equivalent of the first two years of a bachelor's degree program in numerous institutions.

General education core courses completed for the degree are useful regardless of whether you terminate your formal education at NICC or continue your formal education at another college.

If you plan to transfer to a four-year college you should select courses to satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the transferring four-year institution anytime you have questions about course selection.

The Associate in Arts degree is a useful beginning if you want to get a professional degree in business, education, engineering, social work, and other areas.

General Degree Requirements

1. A minimum of 64 credit hours. Note: Students not ready to begin college/transfer level writing and math courses may need additional prerequisite coursework that requires them to exceed the 64 credit hours minimum.

2. A 2.0 cumulative grade point average and a passing grade in all required courses.

3. At least 18 credit hours must be earned at NICC. Individual departments may require specific courses to meet this requirement.

4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with BCA:112, BCA:212, SDV:200, or as prescribed by specific majors.

Specific Requirements for the Associate in Arts Degree

1. Meet minimum general education core requirements in each of the following areas:

	Credits
a. Communication: (ENG:105, SPC:112, and ENG:106 or ENG:108)	9
b. Math and Science (transfer-level): Minimum of one Math and one Science course (BIO, CHM, ENV, MAT, PHS, PHY). One science course must include a lab component.	9
c. Social Science (transfer-level): Select courses from at least two different disciplines in this teaching area: (ECN, GEO, POL, PSY, SOC)	9
d. Humanities (transfer-level): Select courses from at least two different disciplines:(ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL)	12
A minimum of three semester hours of Literature is required: LIT:101, LIT:142, LIT:145, LIT:186	
One of the following History courses is required: ART:203, ART:204, HIS:131, HIS:132, HIS:151, HIS:152, HIS:214/CLS:170.	
e. Additional hours in any combination from the above subject areas	5

2. Remaining Requirements:
These hours will be elective courses designed for transfer. A maximum of 4 hours of developmental or non-transfer courses in the arts and sciences (Communication: COM, ENG, ESL, SPC; Math: MAT; Science: BIO, CHM, ENV, PHS, PHY, SCI; Social Science: ECN, GEO, POL, PSY, SOC; Humanities: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL) and Life Skills may be applied toward meeting the 64 credits required for the degree. A maximum of 16 hours of non-transfer level vocational-technical credits may also be used. (See the Course Classification System guide.)

Associate in Science Degree (AS)

The Associate in Science Degree is primarily designed to enable you to transfer your work to a four-year college or university for the purpose of earning a baccalaureate degree. This degree program also offers opportunities for personal enrichment or career enhancement and provides a foundation in mathematics and science designed for transfer in a prescribed area of specialization. You should choose an intended major at a transfer institution as soon as possible and select courses which are required for your major.

General Degree Requirements

1. A minimum of 64 credit hours. Note: Students not ready to begin college/transfer level writing and math courses may need additional prerequisite course work that requires them to exceed the 64 credit hours minimum.

(Continued)

2. A 2.0 cumulative grade point average and a passing grade in all required courses.

3. At least 18 credit hours must be earned at NICC. Individual departments may require specific courses to meet this requirement.

4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with BCA:112, BCA:212, SDV:200, or as prescribed by specific majors.

Specific Requirements for the Associate in Science Degree

1. Meet minimum general education core requirements in each of the following areas:

	Credits
a. Communication: (ENG:105, SPC:112, and ENG:106 or ENG:108)	9
b. Math and Science (transfer-level): (Math: MAT; Science: BIO, CHM, ENV, PHS, PHY) One Science course must include a lab component.	14
c. Social Science (transfer-level): Select course from two different disciplines (ECN, GEO, POL, PSY, SOC)	9
d. Humanities (transfer-level): Select courses from two different disciplines (ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL)	6

One of the following History courses is required: (ART:203, ART:204, HIS:131, HIS:132, HIS:151, HIS:152, HIS:214/CLS:170)

2. Remaining Requirements:
This area must include at least 10 hours of transfer-level coursework. A maximum of 4 hours of developmental or non-transfer courses in the arts and sciences (Communication: COM, ENG, ESL, SPC; Math: MAT; Science: BIO,CHM, ENV, PHS, PHY, SCI ; Social Science: ECN, GEO, POL, PSY, SOC; Humanities: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL) and Life Skills may be applied toward meeting the 64 credits required for the degree. A maximum of 16 hours of non-transfer level vocational-technical credits may also be used. (See the Course Classification System guide.)

Associate in Science/Career Option Degree (AS/CO)

Career Option programs are designed to provide you with the opportunity to transfer to a four-year institution or to enter immediate employment. When you complete the two-year program you receive the Associate in Science/Career Option Degree. The curriculum offers a strong background in general education as well as career-oriented courses.

General Degree Requirements

1. A minimum of 64 credit hours. Note: Students not ready to begin college/transfer level writing and math courses may need additional prerequisite course work that requires them to exceed the 64 credit hours minimum.

2. A 2.0 cumulative grade point average and a passing grade in all required courses.

3. At least 18 credit hours must be earned at NICC. Individual departments may require specific courses to meet this requirement.

4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with SDV:200 or an equivalent course or as prescribed by specific majors.

Specific Requirements for the Associate in Science/Career Option Degree

1. Meet minimum general education core requirements in each of the following areas:

	Credits
a. Communication (ENG:105, SPC:112, and ENG:106 or ENG:108)	9
b. Math and Science (transfer-level): Minimum of one Math and one Science course (MAT, PHY, ENV, BIO, PHS, CHM). One Science course must include a lab component.	7
c. Social Science (transfer-level): (ECN, GEO, POL, PSY, SOC)	6
d. Humanities (transfer-level): (ART, FLS, ASL, HIS, HUM, DRA, CLS, LIT, MUA, MUS, PHI, REL)	3

(Continued)

e. Additional hours in any combination from the above subject areas 6

2. Complete a minimum of 33 credit hours in a variety of majors.

Philosophy Statement for Technical Education

A technical education at NICC offers you the opportunity and encouragement to become a competent, responsible individual with the ability to adapt to a changing workplace and understand the importance of lifelong learning. Through a variety of teaching strategies, NICC's faculty and staff assist you in acquiring the general and specific skills essential for success in work, career and life. Technical education at NICC emphasizes critical thinking, problem-solving and hands-on application of principles based on a strong theoretical foundation. It allows you to develop an ability to:

- demonstrate specific skills as a member of a highly technical, self-disciplined, productive, and quality-oriented workforce.
- express yourself clearly, concisely, and with sensitivity to others in both written and oral communications.
- listen effectively to and cooperate with others as well as work independently.
- successfully evaluate and adapt to technological and social changes to meet the expanding needs of industry and business in a global marketplace.

Selecting a Degree

The Associate in Arts and Associate in Science degrees are typically pursued when transfer to a four-year institution is likely. NICC recommends that students planning to transfer seek advice from the receiving institution to ensure the best possible transfer.

Curriculums leading to Associate in Applied Science (AAS) degrees are intense programs of study designed to prepare students for employment after graduation. Some majors may transfer to four-year institutions, and students planning to pursue a bachelor's degree should work closely with an academic advisor to plan for successful transfer of coursework. Degree requirements for the AAS include general education courses and specified courses in the chosen area of study, as well as specified and suggested electives. Students should consult an academic advisor regarding graduation requirements.

Technical Degrees

NICC offers the Associate in Applied Science Degree and numerous vocational diplomas.

If you plan to transfer your community college credit to a four-year college, you should select courses to conform with requirements of the particular institution to which you intend to transfer. Consult your advisor any time you have doubts about course selection.

Associate in Applied Science Degree (AAS)

Associate in Applied Science programs are designed to prepare you for immediate employment in a career field while maintaining the opportunity for further education. Each AAS major consists of both high quality technical courses and required general education coursework. While AAS programs stress technical preparation, general education courses complement the technical focus and facilitate graduate opportunities for further education.

General Requirements for the Associate in Applied Science Degree

1. A minimum of 64 credit hours. Note: Students not ready to begin college/transfer level writing and math courses may need additional prerequisite course work that requires them to exceed the 64 credit hours minimum.

2. A 2.0 cumulative grade point average and a passing grade in all required courses.

3. Earn a minimum of 18 credit hours at NICC. Individual departments may require specific courses to meet this requirement.

4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with SDV:200 or an equivalent course or as prescribed by specific majors.

Specific Requirements for the Associate in Applied Science Degree

1. Meet minimum general education course requirements in each of the following areas:

(Continued)

Credits

a. Communication (COM:723 or transfer-level COM, ENG, SPC) 3

b. Math or Science (MAT:102, MAT:744, PHY:710, or transfer-level BIO, CHM, ENV, MAT, PHS, PHY) 3

c. Social Science (transfer-level): (ECN, GEO, POL, PSY, SOC) or Humanities: (transfer-level): ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL) 3

d. Electives (transfer-level): 6
A number of electives may be specified in certain program majors. At least three hours must be taken from Math: MAT:102, MAT:744, or transfer-level Math; Science: BIO, CHM, ENV, PHS, PHY; Communication: COM, ENG, ESL, SPC; Social Science: ECN, GEO, POL, PSY, SOC; Humanities: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL; and three hours can be taken from BCA:112, BCA:212.

2. Complete a minimum of 49 credit hours in a variety of majors.

Diploma Programs

Vocational programs prepare you for entry employment and are designed with the assistance of advisory committees to ensure that graduates meet employment requirements. While preparation for employment is a major objective, several programs provide students with the opportunity to complete an associate's degree with one year of additional study.

You are responsible for knowing the requirements for the diploma you seek to obtain and for planning your schedule to meet those requirements.

General Requirements for the Vocational Diploma

1. A minimum of 30 credit hours.

2. A 2.0 cumulative grade point average and a passing grade in all required courses.

3. Earn a minimum of 9 credit hours at NICC. Individual departments may require specific courses to meet this requirement.

4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with SDV:200 or an equivalent course or as prescribed by specific majors.

Specific Requirements for the Vocational Diploma

1. Meet minimum general education core requirements in the following areas:

Credits

a. Communication (excluding developmental): (COM, ENG, ESL) 3

b. Electives: A number of electives (excluding developmental) may be specified in certain program majors: (Math: MAT; Science: BIO, CHM, ENV, PHS, PHY; Communication: COM, ENG, ESL, SPC; Social Science: ECN, GEO, POL, PSY, SOC) (transfer-level Humanities: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL), Life Skills; and three hours can be taken from BCA:112, BCA:212. 5

2. Complete a minimum of 22 credit hours in specific majors.

Certificate Programs

A certificate is an organized, sharply-focused array of courses that provides training in a specific occupational field. The number of credits required varies between programs. Certificates are designed to serve individuals who:

- want to develop, renew, or enhance occupational competencies to meet their current employment needs;
- need to complete a condensed version of a degree curriculum that focuses on specialized knowledge and skills because of a demanding work schedule;
- seek new occupational skills to enhance their employment marketability.

Customized programs of study are possible in certain majors. You may be able to customize a certificate program to meet your personal needs or those of an employer. Satisfactory completion of the approved courses will result in the award of a certificate. These are regular college courses, which may also be used to complete a diploma or degree at the college. Contact a department dean for further information.

Programs
Calmar Campus

Index of Degrees, Diplomas, and Certificates

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Index of Degrees, Diplomas and Certificates – Calmar Campus

General Education Core Courses
(Applicable to Associate degree requirements)

Communication		Semester Credits
COM:120	Organizational Communication	3
COM:140	Introduction to Mass Media	3
COM:145	Public Relations Media	3
COM:155	Newspaper Production	3
ENG:105	Composition I	3
ENG:106	Composition II	3
ENG:108	Composition II: Technical Writing	3
ENG:221	Creative Writing	3
SPC:112	Public Speaking	3

Humanities		Semester Credits
ART:101	Art Appreciation	3
ART:120	Two-Dimensional Design	3
ART:123	Three-Dimensional Design	3
ART:133	Drawing	3
ART:134	Drawing II	3
ART:203	Art History I	3
ART:204	Art History II	3
ASL:131	American Sign Language I	3
ASL:161	American Sign Language II	3
ASL:241	American Sign Language III	3
ASL:271	American Sign Language IV	3
CLS:150	Latin American History and Culture	3
CLS:170	Russian History and Culture	3
DRA:112	American Film	3
FLS:141	Elementary Spanish I	4
FLS:142	Elementary Spanish II	4
FLS:241	Intermediate Spanish I	4
FLS:242	Intermediate Spanish II	4
HIS:131	World Civilization I	3
HIS:132	World Civilization II	3
HIS:151	U.S. History to 1877	3
HIS:152	U.S. History since 1877	3
HIS:214	Russian History and Culture	3
HIS:247	Study Abroad: British Life and Culture	3
HIS:248	Study Abroad: History of Cambridge, England	3
HUM:108	Cultural Diversity and identity	3
HUM:116	Encounters in Humanities	3
HUM:125	Broadway Musical History	3
HUM:130	Holocaust Perspectives: Confronting the Future	3
HUM:140	Shakespeare: Dramatist, Psychologist, Historian	3
HUM:170	Introduction to Women's Studies	3
LIT:101	Introduction to Literature	3
LIT:142	Major British Writers	3
LIT:145	Shakespeare: Dramatist, Psychologist, Historian	3
LIT:186	Cultures Through Literature	3
MUS:100	Music Appreciation	3
MUS:102	Music Fundamentals	3
MUS:120	Music Theory I	3
MUS:140	Concert Choir	1
PHI:101	Introduction to Philosophy	3
PHI:105	Introduction to Ethics	3
REL:105	Introduction to Religion	3

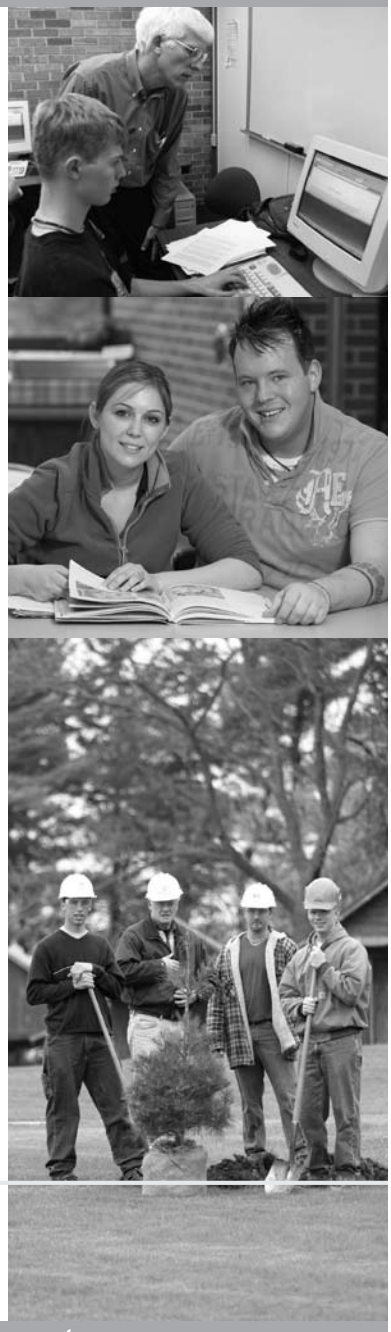
Math		Semester Credits
MAT:110	Math for Liberal Arts	3
MAT:120	College Algebra	3
MAT:128	Precalculus	4
MAT:130	Trigonometry	3
MAT:140	Finite Math	3
MAT:156	Statistics	3
MAT:210	Calculus I	4
MAT:216	Calculus II	4
MAT:219	Calculus III	4

Science		Semester Credits
BIO:112	General Biology I	4
BIO:113	General Biology II	4
BIO:125	Plant Biology	4
BIO:157	Human Biology	4
BIO:165	Human Anatomy and Physiology I	3
BIO:167	Human Anatomy and Physiology I Lab	1
BIO:170	Human Anatomy and Physiology II	3
BIO:172	Human Anatomy and Physiology II Lab	1
BIO:183	Microbiology	3
BIO:184	Microbiology Lab	1
BIO:190	Introductory Biotechnology	3
BIO:248	Introduction to Bioscience Technology	4
CHM:110	Introduction to Chemistry	3
CHM:111	Introduction to Chemistry Lab	1
CHM:160	Chemistry I	3
CHM:161	Chemistry I Lab	1.5
CHM:170	Chemistry II	3
CHM:171	Chemistry II Lab	1.5
CHM:262	Organic Chemistry I	4.5
ENV:115	Environmental Science	3
ENV:116	Environmental Science Lab	1
ENV:140	Natural Resource Conservation	4
PHS:142	Principles of Astronomy	3
PHS:143	Principles of Astronomy Lab	1
PHS:166	Meteorology, Weather, and Climate	4
PHS:170	Physical Geology	3
PHS:171	Physical Geology Lab	1
PHY:106	Survey of Physics	4
PHY:162	College Physics I	4
PHY:172	College Physics II	4

Social Sciences		Semester Credits
ECN:110	Introduction to Economics	3
ECN:120	Principles of Macroeconomics	3
ECN:130	Principles of Microeconomics	3
GEO:121	World Regional Geography	3
POL:111	American National Government	3
PSY:111	Introduction to Psychology	3
PSY:112	Psychology of Human Relations	3
PSY:121	Developmental Psychology	3
PSY:221	Early Child Psychology	3
PSY:222	Child Psychology	3
PSY:226	Psychology of Aging	3
PSY:241	Abnormal Psychology	3
PSY:251	Social Psychology	3
PSY:261	Human Sexuality	3
PSY:281	Educational Psychology	3
PSY:285	Education of Exceptional Learners	3
PSY:294	Crisis Intervention	3
SOC:110	Introduction to Sociology	3
SOC:115	Social Problems	3
SOC:120	Marriage and the Family	3
SOC:140	Human Behavior in the Social Environment	3
SOC:208	Introduction to Cultural Anthropology	3
SOC:209	Archeology	3
SOC:261	Human Sexuality	3

Arts & **Sciences**

(AA=Associate in Arts; AS=Associate in Science)
General Education Core Courses
Associate in Arts Degree, General (AA)
Associate in Science Degree, General (AS)
Agriculture (AS)
Animal Science (AS)
Business Administration (AA)
Communication (AA)
Community and Regional Planning (AA)
Companion Animal Science (AS)
Criminal Justice (AA)
Dairy Science (AS)
Early Childhood (AA)
Education (AA)
Human Services (AA)
Industrial Technology Teacher Education (AS)
Law Enforcement (AA)
Pre-Veterinary Medicine (AS)



student driven...community focused

2008-2009

ASSOCIATE IN ARTS DEGREE (AA) - GENERAL

The Associate in Arts Degree program provides a course of study which, if satisfactorily completed, will readily transfer to most colleges and universities. College parallel-transfer curricula permit completion of the equivalent of the first two years of a bachelor's degree program in numerous institutions.

General education core courses completed for the degree are useful to you, regardless of whether you terminate your formal education at NICC or continue your formal education at another college.

If you plan to transfer to a four-year college, you should select courses to satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

The Associate in Arts degree is a useful beginning if you seek a professional degree in business, education, engineering, social work, and other areas.

GENERAL DEGREE REQUIREMENTS

1. A minimum of 64 credit hours. Note: Students not ready to begin college/transfer level writing and math courses may need additional prerequisite coursework that requires them to exceed the 64 credit hours minimum.
2. A 2.0 cumulative grade point average and a passing grade in all required courses.
3. At least 18 credit hours must be earned at NICC. Individual departments may require specific courses to meet this requirement.
4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with BCA:112, BCA:212, SDV:200, or as prescribed by specific majors.

ENTRANCE REQUIREMENTS

You must have the ability and interest to benefit from the program. A basic skills assessment must be completed prior to being accepted into the program.

AWARD

Associate in Arts Degree (AA)

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Specific Requirements for the Associate in Arts Degree

1. Complete the general degree requirements described earlier.
2. Meet minimum general education core requirements in each of the following areas:

		Credits
a.	Communication (ENG:105, SPC:112, and ENG:106 or ENG:108)	9.0
b.	Math (transfer-level MAT) and Science (transfer-level BIO, CHM, ENV, PHS, PHY) (minimum of one math and one science course)*	9.0
c.	Social Science (transfer-level ECN, GEO, POL, PSY, SOC)**	9.0
d.	Humanities (transfer-level ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL)** One of the following history courses is required: ART:203, ART:204, HIS:131, HIS:132, HIS:151, HIS:152, HIS:214/CLS:170. A minimum of 3 semester hours of literature is required: LIT:101, LIT:142, LIT:145, LIT:186	12.0
e.	Additional hours in any combination from the above subject areas	5.0

3. Remaining Requirements:
   These hours will be elective courses designed for transfer. A maximum of 4 hours of developmental or non-transfer courses in the arts and sciences (Communication: COM, ENG, ESL, SPC; Math: MAT; Science: BIO, CHM, ENV, PHS, PHY, SCI; Social Science: ECN, GEO, POL, PSY, SOC; Humanities: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL) and Life Skills may be applied toward meeting the 64 credits required for the degree. A maximum of 16 hours of non-transfer level vocational-technical credits may also be used. (See the Course Classification System guide.)

*Science courses must include a lab component.

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

ASSOCIATE IN SCIENCE DEGREE (AS) - GENERAL

The Associate in Science Degree is primarily designed to enable you to transfer your work to a four-year college or university for the purpose of earning a baccalaureate degree. This degree program also offers opportunities for personal enrichment or career enhancement and provides a foundation in mathematics and science designed for transfer in a prescribed area of specialization. You should choose an intended major at a transfer institution as soon as possible and select courses which are required for your major.

GENERAL DEGREE REQUIREMENTS

1. A minimum of 64 credit hours. Note: Students not ready to begin college/transfer level writing and math courses may need additional prerequisite course work that requires them to exceed the 64 credit hours minimum.
2. A 2.0 cumulative grade point average and a passing grade in all required courses.
3. At least 18 credit hours must be earned at NICC. Individual departments may require specific courses to meet this requirement.
4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with BCA:112, BCA:212, SDV:200, or an equivalent course or as prescribed by specific majors.

ENTRANCE REQUIREMENTS

You must have the ability and interest to benefit from the program. A basic skills assessment must be completed prior to being accepted into the program.

AWARD

Associate in Science Degree (AS)

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Specific Requirements for the Associate in Science Degree

1. Complete the general degree requirements described earlier.
2. Meet minimum general education core requirements in each of the following areas:

		Credits
a.	Communication (ENG:105, SPC:112, and ENG:106 or ENG:108)	9.0
b.	Math (transfer-level MAT) and Science (transfer-level BIO, CHM, ENV, PHS, PHY)*	14.0
c.	Social Science (transfer-level ECN, GEO, POL, PSY, SOC)**	9.0
d.	Humanities (transfer-level ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL)** One of the following history courses is required: ART:203, ART:204, HIS:131, HIS:132, HIS:151, HIS:152, HIS:214/CLS:170.	6.0

3. Remaining Requirements:
   This area must include at least 10 hours of transfer-level coursework. A maximum of 4 hours of developmental or non-transfer courses in the arts and sciences (Communication: COM, ENG, ESL, SPC; Math: MAT; Science: BIO, CHM, ENV, PHS, PHY, SCI; Social Science: ECN, GEO, POL, PSY, SOC; Humanities: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL) and Life Skills may be applied toward meeting the 64 credits required for the degree. A maximum of 16 hours of non-transfer level vocational-technical credits may also be used. (See the Course Classification System guide.)

*Science course must include a lab component.

**Select courses from two different disciplines

AGRICULTURE (AS)

The Associate in Science with an Agriculture concentration provides a course of study which will readily transfer to many agricultural baccalaureate majors. Your college courses may satisfy the first two years of a bachelor's degree depending on the college to which you plan to transfer.

If you are working toward an Associate in Science degree, take courses in science, communication, math, humanities, social science, and the required agriculture subject areas. The arts and science courses completed for the degree are useful whether you continue your formal education at a four-year college or enter the workforce.

NICC's program is articulated with Iowa State University. When planning to transfer to any other four-year college, you should select courses to satisfy requirements of that specific institution. Consult an advisor on specific general education requirements.

The Associate in Science degree is a good foundation for a professional degree in agriculture business, agricultural studies, agronomy, animal science, dairy science, and other agriculture-related curriculum.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Science Degree requirements (page 22), plus:

		Semester Credits
AGA:114	Principles of Agronomy	3.0
AGS:114	Survey of the Animal Industry	2.0
ECN:110	Introduction to Economics OR	3.0
ECN:130	Principles of Microeconomics	3.0
HIS:151	U.S. History to 1877	3.0
MAT:120	College Algebra OR	3.0
MAT:140	Finite Math	3.0
MAT:156	Statistics	3.0
PHI:101	Introduction to Philosophy OR	3.0
PHI:105	Introduction to Ethics	3.0
	Agriculture Elective	3.0
	Agriculture Electives (transfer-level)	6.0
	Biology Elective (transfer-level)	4.0
	Chemisty Elective (transfer-level)	3.0
	Chemistry Lab Elective (transfer-level)	1.0

Computer Electives:
BCA:112, BCA:212

General Electives:
Visit with your advisor for suggested electives for your major.

May include career education credits.
All electives need to be transferable.

ANIMAL SCIENCE (AS)

Meat production is a multi-billion dollar economic force in agriculture. Beef, pork, poultry, and lamb production are key in the effort to feed an ever-increasing world population with growing food demands. NICC has expanded its leadership in agriculture education to include the management of food animal production locally, regionally, nationally, and globally.

Students enrolling in this program can expect to immediately enter into the workforce after completion of their two-year degree or transfer to a four-year college to pursue a B.S. degree. Career options for graduates include:

- Return to and modernize family operation
- Management position on feedlot, farrowing unit, or large cow/calf operation
- Industry jobs with AI firms or local producer-owned cooperative
- Health-related positions working with/at veterinary clinics
- Beginning producer(s) starting their own operations

Successful students will master artificial insemination, palpation, ultra-sound, hoof care, intravenous treatments, vaccination, banding, dehorning, branding, tattooing, moisture testing, feed bunk management, pasture management, and much more. Students also become proficient in managing a dairy management software package, farm cash flows, budgeting, marketing, job applications, and preparing a tax return.

Successful students will receive transfer-level credits in algebra, statistics, chemistry, biology, public speaking, composition, social science, and humanities. Graduates with an AS in Animal Science transfer as juniors and usually complete their B.S. degree in two years.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Science Degree requirements (page 22), plus:

		Semester Credits
AGA:114	Principles of Agronomy	3.0
AGS:114	Survey of the Animal Industry	2.0
AGS:218	Domestic Animal Physiology	4.0
AGS:226	Beef Cattle Science	3.0
AGS:242	Animal Health	3.0
AGS:250	Food Animal Production	3.0
AGS:305	Livestock Evaluation	3.0
AGS:319	Animal Nutrition	3.0
AGS:331	Animal Reproduction	3.0
AGS:353	Animal Genetics	3.0
AGS:804	Animal Science Internship	3.0
AGS:944	Animal Agriculture Seminar	1.0
BIO:248	Introduction to Bioscience Technology	4.0
CHM:160	Chemistry I	3.0
CHM:161	Chemistry I Lab	1.5
ENG:106	Composition II	3.0
MAT:120	College Algebra	3.0
MAT:156	Statistics	3.0

General Electives:
Visit with your advisor for suggested electives for your major.

BUSINESS ADMINISTRATION (AA)

The Associate in Arts with a concentration in Business Administration provides a course of study which will readily transfer to most four-year colleges and universities. College courses permit completion of the equivalent of the first two years of a bachelor's degree in many four-year colleges. If you are working toward the Business Administration concentration, take courses in science, communication, math, humanities, social science, and the required business subject areas.

The general education courses completed for the degree are useful whether you continue your formal education at a four-year college or enter the workforce. The Associate in Arts with a concentration in Business Administration is a useful beginning if you plan to get a professional degree in accounting, finance, management, marketing, human resources, business education, or computer science.

If you plan to transfer to a four-year college, you should select courses to satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 21), plus:

		Semester Credits
ACC:152	Financial Accounting	4.0
ACC:156	Managerial Accounting	4.0
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:120	Principles of Macroeconomics	3.0
ECN:130	Principles of Microeconomics	3.0
MAT:156	Statistics	3.0

Business Electives: (9 credits)
Transfer-level ACC, BCA, BUS, CIS, FIN, LGL, MGT, MKT, NET

COMMUNICATION (AA)

The Associate of Arts in Communication is a useful beginning if you desire a professional degree in media, public relations, journalism, business, education, and other communications-related areas. Journalists, technical writers, personnel directors, and media specialists need strong communication skills.

This program will prepare you to enter the workforce in local businesses or transfer to a four-year college or university to obtain a baccalaureate degree in a communications or related area.

If you plan to transfer to a four-year college, select courses to satisfy the requirements of your prospective institution. Consult your advisor at the four-year institution to which you intend to transfer with questions about course selection.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

ARTICULATION AGREEMENTS

An articulation agreement is in effect with Wartburg College.

Curriculum

Associate in Arts Degree requirements (page 21), plus:

		Semester Credits
BCA:212	Introduction to Computer Business Applications	3.0
COM:120	Organizational Communication	3.0
COM:140	Introduction to Mass Media	3.0
ENG:106	Composition II AND	3.0
ENG:108	Composition II: Technical Writing	3.0
HUM:108	Cultural Diversity and Identity	3.0
PHI:105	Introduction to Ethics	3.0
PSY:112	Psychology of Human Relations	3.0
*	Communication-Related Electives	15.0

*Communication-Related Electives: Students are urged to work with their academic advisor in the selection of electives to best match career or transfer choice.)

ASL:131	American Sign Language I	3.0
ASL:161	American Sign Language II	3.0
ASL:241	American Sign Language III	3.0
ASL:271	American Sign Language IV	3.0
CIS:205	Fundamentals of Web Programming OR	2.0
CIS:207	Fundamentals of Web Programming OR	3.0
CIS:223	Adobe Web Design	4.0
COM:145	Public Relations Media	3.0
COM:155	Newspaper Production	3.0
COM:936	Occupational Experience	3.0
DRA:112	American Film	3.0
ENG:221	Creative Writing	3.0
FLS:141	Elementary Spanish I	4.0
FLS:142	Elementary Spanish II	4.0
FLS:241	Intermediate Spanish I	4.0
FLS:242	Intermediate Spanish II	4.0
HUM:140	Shakespeare: Dramatist, Psychologist, Historian	3.0
LIT:101	Introduction to Literature	3.0
LIT:142	Major British Writers	3.0
LIT:145	Shakespeare: Dramatist, Psychologist, Historian	3.0
LIT:186	Cultures Through Literature	3.0
MKT:150	Principles of Advertising	3.0

COMMUNITY AND REGIONAL PLANNING (AA)

Community and regional planning is concerned with the economic, social, environmental, psychological, and management aspects of change in a geographic or political area. Planners must attain a broad comprehension of city, metropolitan, urban, rural, regional, and statewide types of development, their interrelationships, and the extent of their changing needs over the short- and long-range future.

This program articulates into the Community and Regional Planning major in the College of Design at Iowa State University and is one of only twelve programs in the U.S. accredited by the Planning Accreditation Board. NICC students will have the opportunity to take two Iowa State courses over the ICN while at NICC. These courses are designed to provide a foundation for planning education. When you graduate from this articulated program, you will transfer at the junior level.

Upon completing your bachelor of science degree in Community and Regional Planning, you will be capable of performing in entry-level positions in public planning agencies or with planning consulting firms. You will be able to integrate planning knowledge and skills in practical applications to current planning issues and communicate in written and oral form.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 21), plus:

		Semester Credits
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:120	Introduction to Macroeconomics OR	3.0
ECN:130	Introduction to Microeconomics	3.0
MAT:156	Statistics	3.0
POL:111	American National Government	3.0
SOC:110	Introduction to Sociology	3.0
	Natural Sciences Electives (transfer-level)	6.0

Iowa State University Courses:*

CRP 253	Survey of Community and Regional Planning
CRP 270	Forces Shaping our Metropolitan Environment

*Iowa State University courses are available on the Iowa Communications Network and may be taken while enrolled in this major at NICC. Credits will apply toward the AA.

COMPANION ANIMAL SCIENCE (AS)

The equine and pet industries continue to be strong economic forces in U.S. agriculture. Horses, dogs, and cats have long been human companions, yet they do create jobs locally, regionally, nationally, and globally. NICC has expanded its education offerings to include this segment of the animal agriculture.

Students enrolling in this program can expect to immediately enter into the workforce after completion of their two-year degree or transfer to a four-year college to pursue a B.S. degree. Career options for graduates include:

- Transfer to four-year colleges for B. S. degree completion
- Management position at an animal-based business
- Industry jobs with AI firms or local producer -owned cooperative
- Health-related positions working with/at veterinary clinics
- Starting their own animal-related business

Successful students will receive transfer-level credits in algebra, statistics, chemistry, biology, public speaking, composition, social science, and humanities. Graduates transfer as juniors and usually complete their B.S. degree in two years.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Science Degree requirements (page 22), plus:

		Semester Credits
Agriculture:		
AGS:114	Survey of the Animal Industry	2.0
AGS:216	Equine Science	3.0
AGS:218	Domestic Animal Physiology	4.0
AGS:224	Companion Animal Science	3.0
AGS:242	Animal Health	3.0
AGS:305	Livestock Evaluation	3.0
AGS:319	Animal Nutrition	3.0
AGS:331	Animal Reproduction	3.0
AGS:353	Animal Genetics	3.0
AGS:804	Animal Science Internship	3.0
AGS:944	Animal Agriculture Seminar	1.0
AGS:xxx	Animal Science Elective	3.0
BIO:248	Introduction to Bioscience Technology	4.0
CHM:160	Chemistry I	3.0
CHM:161	Chemistry I Lab	1.5
ENG:106	Composition II	3.0
MAT:120	College Algebra	3.0
MAT:156	Statistics	3.0

General Electives:
Visit with your advisor for suggested electives for your major.

CRIMINAL JUSTICE (AA)

The Associate in Arts with a concentration in Criminal Justice provides a course of study which will readily transfer to most four-year colleges and universities. College courses permit completion of the equivalent of the first two years of a bachelor's degree at many four-year colleges. You will be working toward the Criminal Justice concentration and take courses in science, communication, math, humanities, social science, and required criminal justice subject areas.

The general education courses completed for the degree are useful to you whether you continue your formal education at a four-year college or enter the workforce. The Associate in Arts with a concentration in Criminal Justice is a useful beginning if you want to get a start in law enforcement, criminal and juvenile justice systems, corrections, or security.

If you are planning to transfer to a four-year college, you should select courses that satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 21), plus:

		Semester Credits
CRJ:100	Introduction to Criminal Justice	3.0
CRJ:111	Police and Society	3.0
CRJ:120	Introduction to Corrections	3.0
CRJ:131	Criminal Law and Procedure	3.0
CRJ:200	Criminology OR	3.0
CRJ:124	Deviance and Crime	3.0
PHI:105	Introduction to Ethics	3.0
POL:111	American National Government	3.0
PSY:111	Introduction to Psychology	3.0
SOC:110	Introduction to Sociology	3.0
SOC:115	Social Problems OR	3.0
PSY:112	Psychology of Human Relations	3.0
*	Computer Elective	3.0
*	Major Elective	3.0

* Electives:
Computer Electives: BCA:112, BCA:212
Major Electives: CRJ:141, CRJ:201, CRJ:215, CRJ:230

DAIRY SCIENCE (AS)

Dairy production is a multi-billion dollar economic force in agriculture. Dairy is key in the effort to feed an every-increasing world population with growing food demands. NICC provides leadership in dairy science education on a local, regional, national, and global basis at the world-class facility in Calmar known as the Dairy Center.

Students enrolling in this program can expect to transfer to a four-year college with junior status after completion of their two-year degree. Career options for graduates who transfer and achieve their B.S. degrees include:

- Return to and modernize family diary operation
- Management position on modern dairy
- Industry jobs with AI firms, milk procurement organizations, and local cooperatives
- Health-related positions working with/at veterinary clinics
- Beginning producers starting their own operations

The Dairy Center's facilities include the "Dueling Parlor" (half-parallel/half herringbone) complete with the industry's latest technological advances, and a 3-row, 144-stall barn equipped with both slatted floors and an alley scraper for manure collection. The spacious special-needs facility is a focal point of many education activities that occur at the Center. The calf center is a premier facility designed to maximize animal and employee performance. New in 2005, the Grazing Center demonstrates low-input dairying with its swing parlor and paddocks. The learning environment for the Dairy Science program is unparalleled.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Science Degree requirements (page 22), plus:

		Semester Credits
AGA:114	Principles of Agronomy	3.0
AGS:114	Survey of the Animal Industry	2.0
AGS:218	Domestic Animal Physiology	4.0
AGS:242	Animal Health	3.0
AGS:319	Animal Nutrition	3.0
AGS:331	Animal Reproduction	3.0
AGS:335	Principles of Milk Production	3.0
AGS:337	Principles of Dairy Production	3.0
AGS:340	Dairy Cattle Evaluation	3.0
AGS:353	Animal Genetics	3.0
AGS:803	Dairy Internship I	3.0
AGS:944	Animal Agriculture Seminar	1.0
BIO:248	Introduction to Bioscience Technology	4.0
CHM:160	Chemistry I	3.0
CHM:161	Chemistry I Lab	1.5
ENG:106	Composition II	3.0
MAT:120	College Algebra	3.0
MAT:156	Statistics	3.0

General Electives:

Visit with your advisor for suggested electives for your major.

EARLY CHILDHOOD (AA)

The Associate in Arts with a concentration in Early Childhood provides a course of study which will readily transfer to a four-year college or university. The AA in Early Childhood is designed as a continuation of the Early Childhood diploma program. It enables you to enter the field of early childhood education as an assistant or lead teacher in a daycare, preschool or Head Start program, and with experience, in a position as director.

The general education courses completed for the degree are useful to you whether you continue your formal education or enter the workplace. The Associate in Arts in Early Childhood is a useful beginning if you want to get a professional degree in early childhood or elementary education.

If you are planning to transfer to a four-year college, you should select courses to satisfy specific requirements of the institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer if you have questions about course selection.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Satisfactory physical and mental health is required. Prior to the Early Childhood field experience, you will be required to complete a criminal record/child and adult abuse registry check, a physical exam, and up-to-date immunizations prior to center participation. A positive criminal or abuse check may prevent you from attending center participation/field experience and completion of the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 21), plus:

		Semester Credits
ECE:109	Orientation to Center Participation	4.0
ECE:133	Child Health, Nutrition, and Safety	3.0
ECE:162	Curriculum: Creative Activities	4.0
ECE:167	Curriculum: Science and Math	2.0
ECE:249	Children's Literature	3.0
ECE:277	Early Childhood Field Experience I	2.0
ECE:278	Early Childhood Field Experience II	3.0
ECE:279	Early Childhood Field Experience III	6.0
ECE:946	Seminar	3.0
HSC:133	First Aid/CPR	0.5
PSY:222	Child Psychology	3.0
PSY:285	Education of Exceptional Learners	3.0
SOC:110	Introduction to Sociology	3.0
*	Early Childhood Elective(s)	3.0

* Early Childhood Electives:
ECE:126, ECE:221, ECE:290

Option: Paraeducator Certification

For Advanced Paraeducator Certification, see Education AA, Paraeducator Certification.

EDUCATION (AA)

The Associate in Arts degree in Education allows you to complete the first two years of a teaching degree and prepares you to transfer into an education major at a four-year college. You are encouraged to identify the baccalaureate program which you intend to transfer into and to work with the faculty advisor to select appropriate courses to meet specific admission requirements.

If you plan to transfer to a four-year college, you should select courses to satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree, Paraeducator Certification

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 21), plus:

Social Science:		Semester Credits
PSY:111	Introduction to Psychology	3.0
PSY:281	Educational Psychology	3.0
SOC:110	Introduction to Sociology	3.0

Science Requirement:
Must complete one natural/life science and one physical science, one of which includes a lab component. Please see the listing in the science course description section of this catalog.

Paraeducator Certification Option

The Paraeducator Certification program is designed to prepare you to support and assist teachers and students in a wide variety of educational and community service settings. You will be given the opportunity to work with children, especially children with disabilities.

The Paraeducator coursework will ensure you have the knowledge and skills needed to support and supplement teacher/provider programs and administrative functions. Upon completion, you will be prepared to apply for Paraeducator Certification from the State Department of Education. Employment opportunities include, but are not limited to, paraprofessional jobs in schools and agencies serving children with disabilities.

ENTRANCE REQUIREMENTS

No requirements for Level I. You must complete a basic skills assessment prior to being accepted into the Level II Option of the Paraeducator Program. Prior to a practicum (Level II), you may be required to complete a criminal record/child and adult abuse registry check.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Level I: All paraeducators wishing to obtain a certificate must go through Level I training.

		Semester Credits
EDU:125/HSV:160	Making a Difference	3.0
EDU:126/HSV:161	Observation and Management of Behavior	3.0

Level II: Areas of Concentration
Completion of Level I plus completion of one three-credit NICC course specific to your area of concentration:

Early Childhood - PK-3
Human Services - PK-12
Special Education - PK-12
Limited English Proficient - PK-12
Career and Transition - Grades 5-12

EDU:175/HSV:162	Introduction to Human Disabilities and Services	3.0

Level II: Advanced Paraeducator Certification
Completion of approved AA degree and practicum, or completion of 62 approved college credits and a practicum.

Associate in Arts Degree requirements plus:
Early Childhood AA, Education AA, Human Services AA

HUMAN SERVICES (AA)

The Human Services program will provide employees for the human services agencies in Northeast Iowa and in the surrounding tri-state area. The program is designed to enable you to enter the workforce as a human service worker on a counseling staff, youth care supervisor, or other occupations in the area. The program also prepares you for transfer to a four-year college or university to obtain a baccalaureate degree in an area of interest such as social work, psychology, sociology, special education, or substance abuse.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Prior to the field experience, you will be required to complete a criminal record/child and adult abuse registry check. A positive report may prevent you from attendance in clinical and completion of the program.

AWARD

Associate in Arts Degree

Note: You may also wish to consider the AAS Human Services Generalist program.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements, (page 21) plus:

		Semester Credits
BCA:212	Introduction to Computer Business Applications	3.0
HSV:150	Human Services Technology I	3.0
HSV:151	Human Services Technology II	3.0
HSV:162	Introduction to Human Disabilities and Services OR	3.0
	Major Elective	3.0
HSV:225	Counseling Techniques	3.0
HSV:250	Essentials of Behavioral Modifications	3.0
HSV:255	Addictive Disease Concepts	3.0
PSY:111	*Introduction to Psychology	3.0
PSY:121	*Developmental Psychology OR	3.0
SOC:140	*Human Behavior in the Social Environment	3.0
PSY:226	*Psychology of Aging	3.0
PSY:241	*Abnormal Psychology	3.0
SOC:110	*Introduction to Sociology	3.0

*Will apply toward General Education core requirements

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

INDUSTRIAL TECHNOLOGY TEACHER EDUCATION (AS)

An innovative 2+2 program is available through a partnership between NICC and Upper Iowa University (UIU). You can earn an Associate in Science degree from NICC and a Bachelor's degree in Secondary Teacher Education with a 7-12 teaching endorsement in Industrial Technology from UIU.

NICC provides courses in general education and the five areas of technical skills required by the Iowa Department of Education: construction, energy and power, graphic communications, manufacturing, and transportation. After your coursework at NICC, you will complete your bachelor's degree requirements at UIU with general education and teacher education courses.

This program is designed for students who desire the challenges and rewards of educating the future citizens and leaders of our country. A tremendous need exists for qualified Industrial Technology teachers in grades 7-12, with demand far exceeding supply. This program will accommodate you if you are just beginning your college education as well as if you have already taken college coursework or even obtained a college degree. You should consult with the department dean for specific course requirements at NICC and UIU.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Science Degree requirements (page 22), plus:

Check with Upper Iowa University and your NICC Advisor for specific degree requirements.

		Semester Credits
Technical Core (NICC)		
AUT:102	Introduction to Automotive Technology	1.0
AUT:123	Applied Automotive Basics I	4.0
AUT:124	Applied Automotive Basics II	3.0
AUT:405	Automotive Suspension and Steering	5.0
AUT:505	Automotive Brake Systems	5.0
BCA:212	Introduction to Computer Business Applications OR	3.0
CIS:223	Adobe Web Design OR	4.0
NET:248	Cisco Discovery: Networking for Home and Small Business OR	3.0
CAD:175	Advanced CAD: AutoCAD OR	2.0
CAD:165	Rendering and Animation	3.0
CAD:172	Introduction to CAD: AutoCAD	2.0
CON:111	Basic Drafting	2.0
CON:113	Construction Print Reading	2.0
CON:376	Construction II	4.0
CON:379	Construction III	4.0
ELE:117	DC Theory	5.0
ELE:118	AC Theory	5.0
WEL:131	Oxyacetylene Welding	3.0
Technical Concentration		10.0

In one of the following technical areas:

- Construction
- Energy and power
- Graphic communications
- Manufacturing
- Transportation

Students must maintain at least a 2.50 grade point average in all technical core and concentration courses taken at NICC.

LAW ENFORCEMENT (AA)

The Associate in Arts with a concentration in Law Enforcement provides a course of study which will readily transfer to most four-year colleges and universities. College courses permit completion of the equivalent of the first two years of a bachelor's degree at many four-year colleges. You will be working toward the Law Enforcement concentration while taking courses in science, communication, math, humanities, social science, and required law enforcement subject areas.

The curriculum meets requirements if you are already employed by a law enforcement agency and wish to obtain professional advancement or if you desire advanced study.

When you graduate, you 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 U.S. Government's Secret Service, Immigration Service, Border Patrol, and courts hire a significant number of law enforcement personnel.

Upon graduation, you may obtain immediate employment with public or private agencies concerned with public safety, crime prevention, or the apprehension and rehabilitation of criminals. However, if you are considering employment with public agencies, you should 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.

If you plan to transfer to a four-year college, you should select courses to satisfy requirements for the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 21), plus:

		Semester Credits
CRJ:111	Police and Society	3.0
CRJ:131	Criminal Law and Procedure	3.0
PHI:105	Introduction to Ethics	3.0
POL:111	American National Government	3.0
PSY:111	Introduction to Psychology	3.0
SOC:110	Introduction to Sociology	3.0
SOC:115	Social Problems	3.0
*	Computer Elective	3.0
	Foreign Language (recommended)	4.0
(Twelve credits must be accepted from the Iowa Law Enforcement Academy.)		12.0

* Computer Electives: BCA:112, BCA:212

PRE-VETERINARY MEDICINE (AS)

When you graduate from the Associate in Science Degree Pre-Vet Medicine program offered at NICC, you can transfer to Iowa State University as a junior and complete your undergraduate curriculum for eventual application to the Iowa State Veterinary School. At NICC, you not only will complete the general math and science requirements, but you also receive practical training in dairy cattle management.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Science Degree requirements (page 22), plus:

		Semester Credits
AGS:218	Domestic Animal Physiology	4.0
AGS:242	Animal Health	3.0
AGS:319	Animal Nutrition	3.0
AGS:331	Animal Reproduction	3.0
BCA:212	Introduction to Computer Business Applications	3.0
BIO:112	General Biology I	4.0
BIO:113	General Biology II	4.0
BIO:248	Introduction to Bioscience Technology	3.0
CHM:160	Chemistry I	3.0
CHM:161	Chemistry I Lab	1.5
CHM:170	Chemistry II	3.0
CHM:171	Chemistry II Lab	1.5
ECN:110	Introduction to Economics	3.0
ENG:106	Composition II	3.0
MAT:120	College Algebra	3.0
PHY:162	College Physics I	4.0

General Electives:
Visit with your advisor for suggested electives for your major.

Technical **Programs**

Accounting Clerk
Accounting Specialist
Administrative Assistant
Agriculture Business
Agriculture Business Certificates: (Ag GIS/GPS; Ag Manager and Marketing; Ag Office Technician)
Agriculture Production
Agriculture Production Certificates: (Agronomy; Animal Science; Dairy)
Arboriculture
Associate Degree Nursing
Automotive Technology
Building Materials Management
Business Specialist
Carpentry
Carpentry Certificates: (Cabinet Making; Finishing Skills; Floor and Framing Skills; Foundation Skills)
Coding Specialist (see Health Information Technology)
Commercial-Residential Electrician
Computer Applications Technician
Computer Technology
Construction Technology
Cosmetology
Cosmetology Diploma
Dairy Science Technology
Dairy Science Technology Certificates: (Dairy Breeding Specialist, Dairy Feeding Specialist, Dairy Health Specialist)
Early Childhood
Electroneurodiagnostic Technology
Emergency Medical Technician-Paramedic
Emergency Medical Technician-Basic Certificate
Enology Specialist
Enology Specialist Diploma Option
Enology Certificate
Entrepreneurial Cosmetology
Firefighting Specialist
Health Information Technology (Coding Specialist)
Human Services Generalist
Human Services Technician
Industrial Electrician
John Deere Ag Tech
Marketing
Marketing Management
Massage Therapy Specialist (Professional Massage Therapy)
Medical Laboratory Technician
Medical Transcriptionist
Nail Technology Certificate
Office Technology: (General; Medical)
Paraeducator Certification (see Education AA)
Practical Nursing
Viticulture Technology
Viticulture Certificate
Viticulture Technology Diploma Option
Web Design Technician Certificate



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ACCOUNTING CLERK

Every successful business must have systematic and up-to-date records of its financial affairs. Maintaining those records is the job of the bookkeeper/accountant who records day-to-day business transactions in journals and ledgers. Employers may also periodically balance accounts and prepare statements for administrative officers showing such things as accounts receivable, accounts payable, and profit and loss. They may also prepare state and federal tax returns. This program is designed to prepare you for employment as an accounting clerk, bookkeeper, cost accounting clerk, or payroll clerk. Simulated practical experience is incorporated into courses during the entire program.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ACC:152	Financial Accounting Applications	4.0
BCA:212	Introduction to Computer Business Applications	3.0
BUS:112	Business Math	3.0
*	General Education Electives	6.0

Term Two		
ACC:156	Managerial Accounting	4.0
ACC:162	Payroll Accounting	4.0
ACC:311	Computer Accounting	3.0
PHI:105	Introduction to Ethics	3.0
SDV:135	Job Seeking Skills	1.0
*	General Education Elective	3.0

*** General Education Electives:**

Two Communication Electives:

COM: 020, COM:120, COM:145, COM:155, COM:723, ENG: 013, ENG:021, ENG:105, ENG:106, ENG:108, ENG:221, SPC:112

One Social Science or Humanities Elective:

Social Science: transfer-level ECN, GEO, POL, PSY, SOC

Humanities: transfer-level ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUS, PHI, REL

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

ACCOUNTING SPECIALIST

This program is designed to prepare you for employment opportunities in the accounting field. Upon completion of the program, you should be prepared to enter business in the areas of cost accounting, general accounting, and many other specialized areas of financial reporting. Requirements include accounting principles and practice in addition to general and occupational information.

Employment opportunities are currently found in small businesses, governmental agencies, manufacturing industries, legal and accounting firms, insurance offices, and agribusiness firms.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ACC:152	Financial Accounting	4.0
BCA:212	Introduction to Computer Business Applications	3.0
BUS:112	Business Math	3.0
BUS:185	Business Law I	3.0
*	General Education Elective	3.0
Term Two		
ACC:156	Managerial Accounting	4.0
ACC:311	Computer Accounting	3.0
PHI:105	Introduction to Ethics	3.0
*	General Education Electives	6.0
Term Three		
ACC:222	Cost Accounting	4.0
ACC:231	Intermediate Accounting I	4.0
ACC:265	Income Tax Accounting	4.0
ECN:120	Principles of Macroeconomics	3.0
	Technical Elective (transfer-level)	4.0
Term Four		
ACC:232	Intermediate Accounting II	4.0
ECN:130	Principles of Microeconomics	3.0
MGT:102	Principles of Management	4.0
SDV:135	Job Seeking Skills	1.0
	Technical Elective (transfer-level)	3.0
	Technical Elective	4.0

* General Education Electives:
Two Communication Electives: ENG:105, ENG:108
One Math Elective: MAT:102 or transfer-level MAT

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

ADMINISTRATIVE ASSISTANT

The administrative assistant will have a well-rounded background in all areas of office management. The program includes upper-level courses in management, law, computers, and accounting as well as coursework in human relations and business communication.

As an administrative assistant, you will play a major role in the success of every business; your position is key to supporting any management function.

After graduation you may transfer up to two years of credits to several colleges.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Completion of the Computer Applications Technician OR the Office Technology Program AND:

Term One		Credits
ACC:152	Financial Accounting OR	4.0
*	Technical Elective	4.0
CIS:615	Post-Advanced Software Applications	3.0
MGT:102	Principles of Management	4.0
*	General Education Elective	3.0
	Technical Elective	3.0

Term Two		
ACC:156	Managerial Accounting	4.0
BUS:185	Business Law I	3.0
HSC:133	First Aid/CPR	.5
*	General Education Elective	3.0
	Technical Electives	6.0

* General Education Electives:

One Math (MAT:102, MAT:744 or transfer-level MAT) or Science (transfer-level BIO, CHM, ENV, PHS, PHY)

One transfer-level General Education Elective: ART, ASL, CLS, COM, DRA, ECN, ENG, FLS, GEO, HIS, HUM, LIT, MAT, MUS, PHI, POL, PSY, REL, SOC, SPC

NOTE:

The Communication Elective required for AAS Administrative Assistant students who have not already fulfilled the requirement in their first year must be COM:723 or one of the following: COM:120, COM:140, COM:145, COM:155, ENG:105, ENG:106, ENG:108, ENG:221, SPC:112

Computer Applications Technician students need to take the following technical electives: ADM:148, ADM:162, ADM:175, ADM:265, ADM:266

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

AGRICULTURE BUSINESS

Agriculture is becoming a highly specialized and technical industry. As a result of this, the demand for trained, enthusiastic people greatly exceeds supply. The Agriculture Business program provides you with a diverse technical, agricultural background with a combination of classroom theory and hands-on training. You develop technical agricultural skills necessary in an agribusiness, as well as skills in communications, human relations, management, and sales. Internships are an integral part of the program of study. With the increased technology and regulation in agribusiness, there is a high demand for qualified graduates.

You can specialize in the areas of GPS/GIS, Manager and Marketing, and Agriculture Office Technician.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
AGA:114	[1]Principles of Agronomy	3.0
AGB:235	Introduction to Agriculture Markets	3.0
ACC:111	Introduction to Accounting OR	3.0
ACC:152	Financial Accounting	4.0
BCA:212	Introduction to Computer Business Applications	3.0
ENG:xxx	Writing Elective	3.0
MAT:xxx	Math Elective	3.0

Term Two		
AGA:157	Soil Fertility	1.0
AGB:802	Agribusiness Internship I	2.0
AGS:101	Working with Animals	2.0
AGS:114	[2]Survey of the Animal Industry	2.0
AGx:xxx	Agriculture Elective	1.0
PHS:193	Introduction to GIS	3.0
PSY:112	Psychology of Human Relations	3.0
	Elective	3.0

Term Three		
AGB:812	Agribusiness Internship II	2.0
AGx:xxx	Agriculture Elective	1.0
	Elective	5.0

Term Four		
AGA:375	Integrated Crop Management	2.0
AGB:336	Agricultural Selling	3.0
AGB:466	Agricultural Finance	3.0
BIO:112	General Biology I OR	4.0
BIO:248	Introduction to Bioscience Technology	4.0
ECN:xxx	Economics Elective	3.0

Term Five		
AGx:xxx	Agriculture Elective	5.0
SPC:112	Public Speaking	3.0
	Elective	4.0

General Education Electives:
Communication Elective: ENG
Math Elective: MAT

[1-2] Articulation:
Articulation can be achieved by successfully passing an NICC Agriculture Department proficiency exam and taking the following at your high school:
[1]Crop Science
[2] Animal Science

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

AGRICULTURE BUSINESS CERTIFICATES

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and complete a basic skills assessment prior to acceptance into the program.

AWARD

Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Agriculture GIS/GPS Certificate

One of the greatest changes that has taken place in agriculture in the last decade is the use of Geographical Information Systems and the Global Positioning System to quantify and manage the land around us. This can involve anything from grid sampling soils and using yield maps on a farm field to analyzing the customer base and finding new clients for an agribusiness. This new technology opens up a wealth of career opportunities for trained individuals, since very few people who are currently in agriculture are adequately trained in the use of the technology.

		Credits
AGA:157	Soil Fertility	1.0
AGA:375	Integrated Crop Management	2.0
AGP:327	Global Positioning Systems and PDA's	1.0
AGP:333	Precision Farming Systems	3.0
AGP:421	Applications of Geographical Information Systems	2.0
BCA:212	Introduction to Computer Business Applications	3.0
BCA:213	Intermediate Computer Business Applications	3.0
PHS:191	Introduction to Global Positioning Systems	1.0
PHS:193	Introduction to GIS	3.0

Agriculture Manager and Marketing Certificate

Agriculture is no longer just a "sweat off your back" occupation. It takes a sharp individual to manage all the different aspects of that farm or business and market its products successfully. This program includes training in the futures market, financial management, web page design, human resource management, as well as consulting and sales. Graduates from the program will have the basic skills needed to manage the changes taking place in agriculture into the next decade.

		Credits
ACC:152	Financial Accounting	4.0
AGB:035	Agriculture Risk Management OR	2.0
AGB:436	Grain Merchandising	2.0
AGB:330	[1]Farm Business Management	3.0
AGB:336	Agriculture Selling	3.0
AGB:466	Agriculture Finance	3.0
CIS:271	Principles of E-Commerce	2.0
MGT:170	Human Resource Management	3.0

Agriculture Office Technician Certificate

The new technologies in crop production products create a high demand for trained individuals in this area. The program emphasizes the proper recognition and analysis of crop production problems. Much of the program is designed around the competencies required of the International Certified Crop Advisor Program. Upon graduation students have the background and training necessary to advance rapidly in the career in crop consulting and precision agriculture. Currently one of the biggest career opportunities is in the area of custom application with numerous job openings and starting salaries of $25,000 to $30,000. The courses for this certificate are available entirely online, so students can work on them from their own location at their own pace.

		Credits
ACC:111	Introduction to Accounting OR	3.0
ACC:152	Financial Accounting	4.0
ADM:162	Office Procedures	3.0
ADM:175	Records and Database Management	2.0
AGA:157	Soil Fertility	1.0
AGB:436	Grain Merchandising	2.0
AGC:108	Agriculture Computer Spreadsheets	1.0
CIS:205	Fundamentals of Web Programming OR	2.0
CIS:207	Fundamentals of Web Programming	3.0
CIS:271	Principles of E-Commerce	2.0
PHS:193	Introduction to GIS	3.0

[1] Articulation

Articulation can be achieved by successfully passing an NICC Agriculture Department proficiency exam and taking the following at your high school:

Farm Management

AGRICULTURE PRODUCTION

The Agriculture Production program is designed to train people to work in the agriculture production industry. It provides the technical agricultural skills necessary in farming in today's agriculture industry. During the first year, you have the option of specializing in several areas by taking specified electives. Included in the first year of study are eight weeks of internship experience in your area of specialty. The Agriculture Production program allows for the flexibility to tailor the program to your own specific interests.

You can specialize in the areas of Animal Science, Dairy, and Agronomy.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Applied Science

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
AGA:114	[1]Principles of Agronomy	3.0
AGB:235	Introduction to Agriculture Markets	3.0
AGx:xxx	Agriculture Elective	2.0
BCA:212	Introduction to Computer Business Applications	3.0
*	Communication Elective	3.0
*	Math Elective	3.0

Term Two		
AGB:330	[2]Farm Business Management	3.0
AGS:101	Working with Animals	2.0
AGC:802	Agriculture Management Internship I	2.0
AGS:114	[3]Survey of the Animal Industry	2.0
AGx:xxx	Agriculture Elective	2.0
PHS:193	Introduction to GIS	3.0
	Elective	3.0

Term Three		
AGC:812	Agriculture Management Internship II	2.0
	Electives	6.0

Term Four		
AGA:375	Integrated Crop Management	2.0
AGB:466	Agricultural Finance	3.0
BIO:112	General Biology I OR	4.0
BIO:248	Introduction to Bioscience Technology	4.0
	Elective	5.0
*	Social Science/Humanities Elective	3.0

Term Five		
AGA:212	Grain and Forage Crops	4.0
AGB:035	Agriculture Risk Management OR	2.0
AGB:436	Grain Merchandising	2.0
AGC:108	Agriculture Computer Spreadsheets	1.0
AGS:319	Animal Nutrition	3.0
AGx:xxx	Agriculture Elective	2.0
	Elective	1.0

* General Education Electives:

One Communication Elective: transfer-level COM, ENG, SPC

One Math Elective: MAT:102; MAT:744, transfer-level MAT

One Social Science or Humanities Elective:

Social Science: transfer-level ECN, GEO, POL, SOC

Humanities: transfer-level ART, CLS, FLS, HIS, HUM, LIT, MUS, PHI

[1-3] Articulation

Articulation can be achieved by successfully passing an NICC Agriculture Department proficiency exam and taking the following at your high school:

[1] Crop Science
[2] Farm Management
[3] Animal Science

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

AGRICULTURE PRODUCTION CERTIFICATES

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and complete a basic skills assessment prior to acceptance into the program.

AWARD

Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Agronomy Certificate

With the new technologies in crop production products, there is a high demand for trained individuals in this area. The proper recognition and analysis of crop production problems are emphasized. Much of the program is designed around the competencies required of the International Certified Crop Advisor Program. Upon graduation, students have the background and training necessary to advance rapidly in the career in crop consulting and precision agriculture. Currently one of the biggest career opportunities is in the area of custom application with numerous job openings and starting salaries of $25,000 to $30,000. The courses for this certificate are available entirely online, so students can work on it from their own location at their own pace.

		Credits
AGA:114	[1]Principles of Agronomy	3.0
AGA:154	Fundamentals of Soil Science	3.0
AGA:157	Soil Fertility	1.0
AGA:212	Grain and Forage Crops	4.0
AGA:283	Pesticide Application Certification	2.0
AGA:374	Pest Identification	1.0
AGA:375	Integrated Crop Management	2.0
AGA:853	Certified Crop Advisor Review	1.0
AGP:333	Precision Farming Systems	3.0
AGP:327	Global Positioning Systems and PDA's OR	1.0
PHS:191	Introduction to Global Positioning Systems	1.0

Animal Science Certificate

The Animal Science option allows students to tailor their training into a variety of areas of animal production. In addition to taking the background courses in animal science, students choose three of six specialized animal production courses.

		Credits
AGS:101	Working with Animals	2.0
AGS:114	[2]Survey of the Animal Industry	2.0
AGS:242	Animal Health	3.0
AGS:319	Animal Nutrition	3.0
AGS:331	Animal Reproduction	3.0
AGS:353	Animal Genetics	3.0
AGS:xxx	Animal Science Elective	3.0
AGS:xxx	Animal Science Lab Elective	2.0

Dairy Certificate

NICC has a nationally recognized dairy program. With the state-of- the-art facilities and outstanding instructors, we consider ourselves second to none. The Dairy option in Agriculture Production allows students to participate in the Dairy program at NICC while emphasizing a more generalized training in agriculture.

		Credits
AGS:240	Animal Health	2.0
AGS:325	Dairy Nutrition	3.0
AGS:328	Parlor Management	1.0
AGS:331	Animal Reproduction	3.0
AGS:332	Dairy: Herd Management Lab I	2.0
AGS:335	Principles of Milk Production	3.0
AGS:336	Dairy Evaluation	2.0
AGS:350	Artificial Insemination of Cattle	1.0
AGS:351	Animal Genetics	2.0

[1-2] Articulation

Articulation can be achieved by successfully passing an NICC Agriculture Department proficiency exam and taking the following at your high school:

[1] Crop Science

[2] Animal Science

ARBORICULTURE

Arboriculture involves caring for the trees and landscape vegetation found in and around cities, towns, rural residences, parks, and rights-of-way. The need for trained and educated arborists and urban foresters is well documented and rapidly expanding. Individuals with a thorough knowledge of trees, and the community of plants and animals that surround them, will continue to be in high demand throughout North America.

Employment opportunities include commercial tree care services, utility companies, municipal forestry departments, county conservation agencies, golf courses, public park districts, nurseries, garden centers, campus landscape facilities, corporate grounds managers, landscape contractors, and owner-operated commercial ventures.

The Arboriculture curriculum is designed to provide career education and technical preparation necessary to gain employment immediately after graduation or establish a foundation for further education. A combination of classroom instruction, laboratory exercises, field activities, on-site investigations, conference attendance, and supervised occupational training experience will prepare you for a wide variety of outdoor employment opportunities.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
AGH:239	Introduction to Arboriculture and Ornamental Horticulture	4.0
BIO:125	Plant Biology	4.0
ENG:105	Composition I	3.0
	Computer Science Elective	1.5
	Elective	3.0
Term Two		
AGN:135	Urban and Rural Forest Management	4.0
AGN:136	Tree Physiology, Pest, Abiotic Disorders and Treatments	4.0
HSC:133	First Aid/CPR	.5
SPC:112	Public Speaking	3.0
*	Technical Elective	3.0
Summer Term		
AGN:804	Arboriculture Internship I	4.5
AGN:814	Arboriculture Internship II	4.5
Term Three		
AGN:137	Tree Identification and Selection	4.0
ENV:115	Environmental Science	3.0
ENV:116	Environmental Science Lab	1.0
PSY:112	Psychology of Human Relations	3.0
*	Technical Elective	3.0
Term Four		
AGN:138	Tree Establishment, Maintenance, and Removal	4.0
ENV:140	Natural Resource Conservation	4.0
SDV:135	Job Seeking Skills	1.0
*	Technical Elective	3.0
*	Math Elective	3.0

* Electives:
Arboriculture Electives: AGH:290, AGN:139, AGN:230
Math Electives: MAT:041, MAT:053, MAT:063, MAT:102, MAT:744, transfer-level MAT

Note: AGN:804 and AGN:814 may be taken any semester.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

ASSOCIATE DEGREE NURSING

The Associate Degree Nursing program prepares you to assess, plan, implement, and evaluate the health care needs of patients and clients. This comprehensive program includes specific nursing courses as well as core course requirements in the areas of communication, science, math, social science, and life skills. Classroom activities are closely correlated with selected learning experiences in hospitals and other health care settings. After successful completion of this program, you are eligible to write the National Licensure Exam (NCLEX) to become a Registered Nurse. The program is approved by the Iowa Board of Nursing.

This program participates in a state-wide articulation program which facilitates transfer of ADN graduates to four-year institutions within Iowa for the advanced study of nursing.

Nursing courses with a clinical component may not be taken by a person who has been denied nursing licensure by a board of nursing; whose nursing license is currently suspended, surrendered, or revoked in any U.S. jurisdiction; whose nursing license/registration is currently suspended, surrendered, or revoked in another country due to disciplinary action.

CLASS HOURS

Classes are scheduled two or three days per week on campus. Clinical experiences are scheduled the remaining days in hospitals, nursing homes, and other health care settings and can occur on either the day or evening shift. Carpools are considered when making assignments to clinical activities.

ENTRANCE REQUIREMENTS

The ADN program is a ladder-concept program. Prior to acceptance into the Nursing program, students must have successfully completed Human Anatomy and Physiology I and Lab. Once completed, students will be accepted into the Nursing program. Students who graduate from NICC's Practical Nursing program are eligible to complete the sophomore year for completion of an AAS in Nursing. Advanced-standing students who are current LPN's can articulate into the sophomore year only after transcript review, space availability, and Dean of Health approval. A Licensed Practical Nurse seeking admission will need to provide proof of current licensure and complete ADN:146, BIO:165, BIO:167, BIO:170, BIO:172, and a life-span growth and development course prior to starting the sophomore year. The advanced-standing students will begin coursework with ADN:148. All nursing students are required to attend a program orientation prior to entrance into the program. Notification of dates and times will occur after acceptance to the Nursing program. In addition, the following requirements must be satisfied prior to or during term one of NICC's Nursing program.

Nursing Concepts is in term two of the Nursing program and is the first clinical course. If any of the following are not completed prior to starting Nursing Concepts, your opening in the program will be forfeited and offered to another student. The student who does not successfully satisfy the program requirements listed below will be placed at the bottom of the waiting list after submission of the required paperwork.

- Completion with a grade of C- or better of the following general education courses:
  - Human Anatomy and Physiology II with lab
  - Dosage Calculations
- Submission of current physical and immunization records.
- *Completion of an American Heart Association HealthCare Provider CPR or American Red Cross CPR for the Professional Rescuer certification. A copy of your current CPR certification must be submitted.
- Clearance on a criminal, dependent adult and child abuse background screening. You will receive information regarding the screenings after acceptance into the Nursing program. Note: A positive report may prevent you from attendance in clinical and completion of the program.
- *Successful completion of a 75-hour Certified Nurse Aide (CNA) course from a community college or an approved CNA course provider. A copy of your certificate must be submitted. Please contact NICC Continuing Education, 563-562-3263 ext. 399, to arrange a course.
- *Completion of the written and skill competency tests for the CNA registry. A copy of your CNA registry results must be submitted.

Items indicated with an * may be submitted immediately. Verification materials should be submitted to:

(Continued...)

Northeast Iowa Community College
Health Department Secretary
P.O. Box 400
Calmar, IA 52132

In addition to the above requirements, you may also be required to provide documentation of health insurance coverage and undergo drug screening. Please be aware of the following physical demands during your clinical education courses. Daily activities require bending, stooping, squatting, reaching, pushing, and pulling in all directions. You will be asked to lift and carry objects weighing up to a minimum of 50 pounds and also shared weight. Clinical tasks require use of hands for repetitive action such as simple and firm grasping and fine manipulation and walking, including stair stepping. You may also be in contact with communicable diseases and chemical/biohazardous materials and odors. For clinical assessments, visual and hearing acuity is essential. Travel to clinical sites in outlying areas will be required at times throughout the program. Students are responsible for any travel costs. You will need to show proof of high school graduation or equivalent prior to taking the NCLEX licensure exam. The Iowa Board of Nursing will no longer review criminal history prior to application for licensure.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

(For summer entry)

Term One		Credits
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
ENG:105	Composition I	3.0
PNN:200	Dosage Calculations	1.0
Term Two		
PNN:174	Nursing Concepts	7.0
PNN:204	Pharmacology Medications	1.0
PNN:270	Introduction to Nutrition	2.0
PNN:527	Nursing Care of Adults I	3.5
PSY:121	Developmental Psychology	3.0
Term Three		
PNN:529	Dimensions of Practical Nursing	4.25
PNN:410	Nursing Care of Children	2.0
PNN:432	Nursing Care of the Childbearing Family	2.25
PNN:528	Nursing Care of Adults II	6.0
Term Four		
ADN:148	Transition to Associate Degree Nursing	4.0
BIO:183	Microbiology	3.0
BIO:184	Microbiology Lab	1.0
PSY:111	Introduction to Psychology	3.0
Term Five		
ADN:444	Comprehensive Nursing Care of Children AND	4.0
ADN:475	Comprehensive Nursing Care of the Mental Health Client AND	6.0
ADN:434	Comprehensive Nursing Care of the Childbearing Family	4.0
ENG:106	Composition II OR	3.0
SPC:112	Public Speaking	3.0
Term Six		
ADN:526	Comprehensive Nursing Care of Adults	12.0
SOC:110	Introduction to Sociology	3.0

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

NOTE: The following year rules exist for nursing program coursework. If exceeded, the course(s) will need to be repeated. Nursing courses and Anatomy and Physiology courses cannot be greater than five years old. Introduction to Psychology cannot be greater than ten years old prior to taking Comprehensive Nursing Care of the Mental Health Client.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

RN TO BSN Coursework

The Iowa state-wide articulation plan for nursing education allows Iowa community college credit from an A.D.N. degree to be accepted in transfer for half (a total of 64 hours) of a Bachelors of Science in Nursing degree (B.S.N.) at an Iowa college or university program. Clarke College in Dubuque, Luther College in Decorah, and the University of Iowa in Iowa City have such programs as well as other schools in the state. There are also distance learning options around the country. Most require that you have attained your RN license. For further information, contact your NICC advisor.

AUTOMOTIVE TECHNOLOGY

In the 21st century, there have been remarkable advances in technical design, construction, and complexity of automobiles. New technologies to improve exhaust emissions, engine performance, fuel consumption, and driveability have overwhelmed the job market with the need for highly-trained technicians, since many currently employed technicians do not possess the education or experience to successfully manage these changes. In addition, the needs of business, industry, and the public require a constant influx of educated technicians.

The Automotive Technology program is designed to provide you with the expertise to repair and maintain technologically advanced vehicles. The program gives you the opportunity to acquire a thorough understanding of the basic principles, purposes, and operation of the various systems and components of today's automobiles. The automotive laboratories are well-equipped for training in all facets of automobile repair, including theory and practical application in diagnosis and tune-up, electrical and hydraulic systems, automatic transmissions, engines, emission controls, fuel systems, brakes, and suspensions systems. Graduates of the program find a wide range of employment opportunities in automotive dealerships, mass-merchandisers, fleets, independent garages, and service stations.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ADM:106	Introduction to Keyboarding OR	2.0
SDV:200	Introduction to Microcomputers	1.5
AUT:102	Introduction to Automotive Technology	1.0
AUT:405	Automotive Suspension and Steering	5.0
AUT:505	Automotive Brake Systems	5.0
AUT:871	Automotive Service Management I	2.0
*	General Education Electives	6.0

Term Two		
AUT:306	Automotive Manual Drive Train and Axles	6.0
AUT:639	Automotive Electrical and Ignition Systems	5.0
AUT:872	Automotive Service Management II	2.0
PSY:xxx	Psychology Elective (transfer-level)	3.0

Term Three		
AUT:706	Automotive Heating and Air Conditioning	6.0
AUT:815	Automotive Engine Performance	9.0
AUT:873	Automotive Service Management III	2.0
*	Science Elective	4.0

Term Four		
AUT:169	Automotive Engine Repair	9.0
AUT:219	Automotive Automatic Transmissions/ Transaxles Service	6.0
AUT:874	Automotive Service Management IV	2.0
*	General Education Elective	3.0

* General Education Electives:

One Communication Elective:
ENG:105, ENG:106, SPC:112

One Math Elective:
MAT:102, MAT:110, MAT:744, transfer-level MAT

One General Education Elective:
ART:101, ART:133, ASL:131, ASL:161, BIO:112, BIO:113, CHM:110, CHM:111, ECN:110, ECN:120, ECN:130, ENG:105, ENG:106, ENV:115, ENV:116, ENV:140, FLS:141, FLS:142, GEO:121, HIS:131, HIS:132, HIS:151, HIS:152, LIT:101, LIT:102, LIT:110, MAT:120, MAT:128, MAT:130, MAT:156, PHI:101, PHI:105, PHY:106, PHY:162, PHY:172, POL:101, PSY:111, PSY:112, PSY:121, SOC:110, SOC:115, SOC:120, SOC:121, SOC:140, SPC:112

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Building Materials Management

Building Materials Management prepares you for trainee positions in marketing and management in the supply of construction materials. Coursework includes construction, marketing, business, and general education areas.

There is a steady demand for trained individuals for supervisory and management positions in lumber retail outlets, small stores where lumber products are sold or distributed, and sales and management in wholesale supply organizations. The Building Materials Management program will prepare you with hands-on experience and technical knowledge to give you confidence when you seek employment in this aspect of the construction field.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and must complete a basic skills assessment prior to acceptance into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ACC:152	Financial Accounting	4.0
CON:111	Basic Drafting	2.0
CON:376	Construction II	4.0
HSC:133	First Aid/CPR	.5
MGT:102	Principles of Management	4.0
*	Communication Elective	3.0
*	Math Elective	3.0-4.0

Term Two		
ACC:156	Managerial Accounting	4.0
BUS:185	Business Law I	3.0
CON:379	Construction III	4.0
MKT:110	Principles of Marketing	3.0
PSY:112	Psychology of Human Relations	3.0

Students may choose CON:375 Construction I as an elective, but not in place of CON:376 Construction II or CON:379 Construction III.

* Electives:

Communication Electives: COM:723, ENG:105, SPC:112

Math Electives: MAT:063, MAT:130, MAT:156, MAT:779

Demonstrated computer literacy is a requirement for graduation. This requirement may be met by completion of a high school or college computer literacy course acceptable to the department or completion of a proficiency exam.

BUSINESS SPECIALIST

The Business Specialist program provides you with basic knowledge and skills in preparation for business positions of a general nature. Areas of emphasis include accounting, marketing, management, supervision, and business law. After graduation you are prepared to seek employment in entry-level management and supervisory positions.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BUS:103	Introduction to Business	4.0
	Elective	3.0
*	General Education Electives	6.0
*	Technical Elective	3.0

Term Two		
BCA:112	Introduction to Data Processing	3.0
MGT:102	Principles of Management	4.0
MKT:110	Principles of Marketing	3.0
*	General Education Electives	6.0
*	Technical Elective	3.0

Term Three		
ACC:152	Financial Accounting	4.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:120	Principles of Macroeconomics	3.0
MGT:170	Human Resources Management	3.0
SDV:135	Job Seeking Skills	1.0
*	General Education Elective	3.0

Term Four		
ACC:156	Managerial Accounting	4.0
BUS:180	Business Ethics	3.0
BUS:185	Business Law I	3.0
ECN:130	Principles of Microeconomics	3.0
MGT:215	Principles of Financial Management	3.0
*	Technical Elective	3.0

* Electives:

General Education Electives:

- Two Communication Electives: ENG:105, SPC:112
- One Math Elective: MAT:102, MAT:744, transfer-level MAT; or Science: transfer-level BIO, CHM, ENV, PHS, PHY
- One Social Science Elective: transfer-level ECN, GEO, POL, PSY, SOC; or Humanities: transfer-level ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUS, PHI, REL
- One General Education Elective: transfer-level ART, ASL, CLS, COM, DRA, ECN, ENG, FLS, GEO, HIS, HUM, LIT, MAT, PHI, POL, PSY, REL, SOC, SPC

Technical Electives:

- ACC, ADM, BCA, BUS, CIS, CSC, FIN, GRA, LGL, MGT, MKT, NET

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

CARPENTRY

The Carpentry program offers education and practical experience in basic residential carpentry. You will receive competency-based instruction in the use of up-to-date carpentry production equipment such as saws, jointers, sanders, and routers. Practical experience is provided through construction of a residence each year by the carpentry students. As the carpentry trade is one of the most basic trades in our society, employment opportunities for carpenters may be found in communities of all sizes.

NICC's Carpentry program is recognized by the Associated General Contractors of America through the National Center for Construction Education and Research.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and complete a basic skills assessment prior to being accepted into the program.

Sequence of program courses begins in the summer term. Admission of new students for fall or spring semesters is by permission of department dean only.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
CON:111	Basic Drafting	2.0
CON:113	Construction Print Reading	2.0
CON:141	Basic Construction Skills	2.0
CON:166	Construction Lab I: Foundations	4.0
CON:375	Construction I	3.0
Term Two		
CON:376	Construction II	4.0
CON:378	Construction Lab II	10.0
MAT:130	Trigonometry OR	3.0
MAT:779	Applied Trigonometry	3.0
SDV:135	Job Seeking Skills	1.0
Term Three		
CON:379	Construction III	4.0
CON:381	Construction Lab III	10.0
*	Communication Elective	3.0

* Communication Electives:
COM:723, ENG:105, SPC:112

Prior to completion of Term 1, students will acquire a completion certificate for First Aid/CPR.

NOTE: During Term 1, while enrolled in CON:166, students will complete a ten-hour OSHA training course online through Career Safe Online.

Demonstrated computer literacy is a requirement for graduation. For this program that requirement may be met by completion of a college computer literacy course acceptable to the department.

CARPENTRY CERTIFICATES

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and must complete a basic skills assessment prior to being accepted into the program.

AWARD

Certificate

LENGTH

The length of the certificate will depend upon your educational preparation and the course load you carry.

Cabinet Making Certificate

This certificate emphasizes techniques involved in the building of residential and light commercial cabinets in terms of joinery for cabinet work. Students complete hands-on competency-based training using different types of joinery in constructing cabinets with doors and drawers included in cabinet structures.

		Credits
CON:384	Cabinet Making	5.0

Finishing Skills Certificate

This certificate emphasiz es techniques involved in the building of residential and light commercial structures in terms of finish work. You complete hands-on competency-based training at a student building project in interior finish work and installation.

		Credits
CON:379	Construction III	4.0
CON:381	Construction Lab III	10.0

Floor and Framing Skills Certificate

This certificate offers hands-on training in floor systems and framing for the construction of residential and small commercial-type structures. You learn floor framing, wall framing, roof framing, roofing, siding, and exterior millwork on a student building project.

		Credits
CON:376	Construction II	4.0
CON:378	Construction Lab II	10.0

Foundation Skills Certificate

This certificate is designed to provide competency-based instruction concerning the use of tools, materials, and practices used in the building trades. You apply this knowledge to concrete form construction, footing and foundation, framing, laying out joists, subflooring, wall studs, windows, doors, rafters, and related cuts for a student building project.

		Credits
CON:111	Basic Drafting	2.0
CON:113	Construction Print Reading	2.0
CON:166	Construction Lab I: Foundations	4.0
CON:375	Construction I	3.0

COMMERCIAL-RESIDENTIAL ELECTRICIAN

Electricity and electrical devices permeate our existence from our cars and homes to every facet of our daily routine. The Commercial-Residential Electrician program offers an opportunity to gain practical, hands-on experience in residential and commercial electrical service installation as well as a solid theoretical foundation. You are given the opportunity to acquire skills and training in alternating and direct current, National Electrical Code, electrical design, motor control principles, and motor repair through classroom experience and a student building project that provides on-site activities.

When you graduate from the Commercial-Residential Electrician program, you can seek employment with electrical contractors, private companies, and other electrical construction, installation, and maintenance employers. The employment placement record for graduates is exceptionally high (near 95 percent). This program is recognized by the Associated Builders and Contractors who award apprenticeship credit to graduates.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and meet the minimum entrance requirements on a basic skills assessment that places you in MAT:063 Elementary Algebra or higher.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ELE:117	DC Theory (8 weeks)	5.0
ELE:118	AC Theory (8 weeks)	5.0
ELE:142	Electrical Materials Identification	1.0
*	General Education Electives	6.0
*	Computer Elective	3.0
Term Two		
ELE:107	Electrical Blueprint Reading	3.0
ELE:135	Electrical Installation	5.0
ELE:146	Commercial-Residential Lab	6.0
ELE:151	National Electrical Code I	3.0
*	General Education Elective	3.0
Term Three		
ELE:152	National Electrical Code II	3.0
ELE:193	Motor Repair	3.0
ELE:196	Motor Control Principles	4.0
HSC:133	First Aid/CPR	.5
*	General Education Elective	3.0

* Electives:

General Education Electives:

One Communication Elective: COM:020, COM:723, ENG:021, ENG:105

Math Elective(s):

MAT:063 and MAT:779 OR
MAT:120 and MAT:130 OR
MAT:744

One Science Elective: PHY:106, PHY:162, PHY:710

Computer Electives: BCA:112, BCA:212, CIS:125, NET:248

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

COMPUTER APPLICATIONS TECHNICIAN

Computer applications are continually restructuring the manner in which a company uses data to run efficiently and improve quality. By compiling, accessing, arranging, and communicating information, businesses produce, market, and improve services to meet and exceed the needs of consumers.

In the Computer Applications Technician program you will develop skills in electronic data entry, access, construction, and manipulation of data that will make you a valued employees of any business. When you complete the Computer Applications Technician program, you will be able to enter the job market or continue your education using a diverse range of computer-related technology and skills.

Upon successful completion of this nine-month program, you will be awarded a diploma and afforded the opportunity to continue in the Administrative Assistant program. You may also enter the Computer Technology program (additional semesters may be needed to complete htis degre).

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ADM:116	Keyboarding II	3.0
BCA:112	Introduction to Data Processing	3.0
BCA:212	Introduction to Computer Business Applications	3.0
*	General Education Electives	9.0

Term Two		
ACC:111	Introduction to Accounting OR	3.0
ACC:152	Financial Accounting	4.0
ADM:119	Keyboarding III	3.0
ADM:132	Business Math and Calculators	2.0
BCA:213	Intermediate Computer Business Applications	3.0
CIS:223	Adobe Web Design	4.0
SDV:135	Job Seeking Skills	1.0
*	General Education Elective	3.0

* General Education Electives:

Two Communication Electives: COM:020, COM:120, COM:145, COM:155, COM:723, ENG:013, ENG:021, ENG:105, ENG:106, ENG:108, ENG:221, SPC:112

Social Science Elective: PSY:112

One Math Elective: MAT:063, MAT:102, MAT:779, transfer-level MAT; or any Science Elective (excluding SCI:001)

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

COMPUTER TECHNOLOGY

The dawn of the computer age has started a revolution in all of society. Computers are everywhere: industry, business, school, and home. The Computer Technology program prepares you for the unique opportunities afforded by this revolution by giving you the technical skills necessary through a combination of classroom and hands-on experiences. You will learn how to install, maintain, operate, and repair computer hardware devices by using the latest software information for troubleshooting and analysis. This program provides the solid background in mathematics, physics, electricity, electronics, and computer networking required to successfully manage the computers of today and tomorrow.

Computer technicians and network administrators are needed in all facets of business and industry, and the demand is exceptionally high. They find employment in both large and small companies, servicing computers and related equipment either as part of a service team or on their own. With additional on-the-job experience, a graduate of NICC's Computer Technology program will be ready to advance into challenging and well-paying positions.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:112	Introduction to Data Processing	3.0
CIS:125	Introduction to Programming Logic w/Language	3.0
CIS:205	Fundamentals of Web Programming	2.0
ELE:113	AC/DC Fundamentals	3.0
ELT:317	Digital Logic Circuits	2.0
NET:238	Cisco Discovery: Networking for Home and Small Business	3.0
*	General Education Elective	3.0

Term Two		
CIS:142	Computer Science	4.0
ELT:310	Digital Circuits	4.0
NET:249	Cisco Discovery: Working at a Small-to-Medium Business or ISP	3.0
*	General Education Electives	6.0

Term Three		
CIS:115	Introduction to the AS/400	1.0
CIS:153	Data Structures	4.0
ELT:613	Microprocessors	4.0
NET:250	Cisco Discovery: Introducing Routing and Switching in the Enterprise	3.0
NET:453	UNIX	3.0
*	General Education Elective	3.0

Term Four		
CIS:303	Introduction to Database	3.0
NET:116	Computer Systems and Troubleshooting	5.0
NET:251	Cisco Discovery: Designing and Supporting Computer Networks	3.0
NET:320	Microsoft Server	4.0
PHS:193	Introduction to GIS	3.0

* General Education Electives:
Two Communication Electives: ENG:105, SPC:112
One Math Elective: MAT:156
One Social Science Elective: PSY:112

Demonstrated computer literacy with the completion of BCA:212 or equivalent is required for enrollment.

CONSTRUCTION TECHNOLOGY

The Construction Technology program prepares you for commercial carpentry, entry-level management, or trainee supervisory positions in the construction and materials supply industry. Courses in hands-on construction experience, communications, business, and mathematics develop the job-site skills necessary to exercise supervision of a construction site after some practical experience.

This program is designed to train you for employment in the construction technology field as well as increase the skills and opportunities if you are already employed in a construction field. Construction managers may be employed by a construction firm or as part of a construction team in supervisory and management positions in lumber retail outlets, small stores where lumber products are sold or distributed, and sales and management in wholesale supply organizations. The construction manager advises and assists the construction team, reviews construction plans and specifications, makes recommendations regarding the feasibility, economy, materials, labor, projected costs, and time requirements for project activities, and supervises all aspects of the construction process. Wages will vary with location of job and experience.

NICC's Construction Technology program is recognized by the Association of General Contractors of America through the National Center for Construction Education and Research.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Applied Science

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
CON:111	Basic Drafting	2.0
CON:113	Construction Print Reading	2.0
CON:141	Basic Construction Skills	2.0
CON:166	Construction Lab I: Foundations	4.0
CON:375	Construction I	3.0
Term Two		
CON:376	Construction II	4.0
CON:378	Construction Lab II	10.0
MAT:130	Trigonometry OR	3.0
MAT:779	Applied Trigonometry	3.0
Term Three		
CON:379	Construction III	4.0
CON:381	Construction Lab III	10.0
ENG:105	Composition I OR	3.0
SPC:112	Public Speaking OR	3.0
COM:723	Workplace Communications	3.0
Term Four		
CAD:172	Introduction to CAD	2.0
CON:382	Construction IV	5.0
CON:383	Building Codes and Specifications	3.0
MGT:102	Principles of Management	4.0
PSY:112	Psychology of Human Relations	3.0
Term Five		
CAD:175	Advanced CAD	2.0
CON:384	Cabinet Making	5.0
CON:385	Construction Estimating	3.0
PHY:162	College Physics I OR	4.0
PHY:710	Technical Physics	3.0
SOC:xxx	Sociology Elective	3.0

It is suggested that all AAS students work in commercial construction during the summer between their term three and term four semesters.

Prior to completion of term 1, students will acquire a completion certificate for First Aid/CPR.

During Term 1, while enrolled in CON:166, students will complete a 10-hour OSHA training course online through Career Safe Online.

Demonstrated computer literacy is a requirement for graduation and may be met by the completion of a college computer literacy course acceptable to the department.

COSMETOLOGY

The Cosmetology program prepares you to work in a full-service salon and/or allows you to work towards salon ownership and professional management. You will be equipped to enter the workplace in a variety of settings.

Cosmetology students are required by the State of Iowa to complete a minimum of 2100 hours in a Cosmetology program. You will be required to wear black slacks, shoes and socks, and an approved lab coat in the salon.

ENTRANCE REQUIREMENTS

You must have the ability and interest to benefit from the program and must complete a basic skills assessment prior to acceptance into the program. Prior to the Mentorship Experience, you may be required to complete a criminal background check. The Cosmetology Iowa Board of Arts and Science will no longer review criminal history prior to application to licensure. You will need to show proof of high school graduation or equivalent prior to taking the State Licensure Exam.

AWARD

Associate in Applied Science or Diploma
(see also Entrepreneural Cosmetology AAS, Page 60)

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Cosmetology (AAS)

The AAS degree provides a strong foundation in Cosmetology with theory and clinical experience directed and guided by Cosmetology professionals in combination with general education courses that support the core curriculum. Graduates of the program will be qualified to pursue a baccalaureate degree at a four-year college or university in an area of interest such as management or business.

Suggested Course Sequence

Term One		Credits
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
COS:110	Basic Principles in Cosmetology	4.0
COS:159	Practical Cosmetology Skills I	6.0
ENG:105	Composition I	3.0
PSY:112	Psychology of Human Relations	3.0

Term Two		
COS:114	Chemical Services II	2.0
COS:119	Practical Cosmetology Skills II	7.0
COS:156	Chemical Services I	3.0
COS:160	Practical Cosmetology Skills III	7.0
MAT:063	Elementary Algebra OR	4.0
MAT:xxx	Math Elective (transfer-level)	3.0

Term Three		
BIO:183	Microbiology	3.0
BIO:184	Microbiology Lab	1.0
COS:116	Salon Management	2.0
COS:121	Practical Cosmetology Skills IV	7.0

Term Four		
COS:112	Care of Skin and Scalp	2.0
COS:123	Practical Cosmetology Skills VI	7.0
COS:155	Haircutting and Styling Techniques	1.0
COS:157	Legal Aspects of Cosmetology	1.0
COS:158	Comprehensive Cosmetology Review	3.0
COS:161	Practical Cosmetology Skills V	7.0

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

(Continued...)

Cosmetology (Diploma)

This program prepares you to work in a full-service salon. The program features hair trichoanalysis, shampoo sets, permanents, and chemical hair relaxing. You can become a make-up artist, esthetican (skin care), cosmetic chemist, hair colorist, retail specialist and an educational specialist. Equipment, supplies, and courses are up-to-date, accurate, and based on current practices in cosmetology.

All Cosmetology students are required by the State of Iowa to complete a minimum of 2100 hours in a Cosmetology program. NICC students finish the program when they complete the state hour requirements as well as meet individual course requirements and general educational classes. In the salon, you are required to wear black slacks, shoes and socks, and an approved lab coat.

The Cosmetology Iowa Board of Arts and Science will no longer review criminal history prior to application to licensure.

Suggested Course Sequence

Term One		Credits
COM:723	Workplace Communications OR	3.0
COM:xxx	Communication Elective (transfer-level)	3.0
COS:110	Basic Principles in Cosmetology	4.0
COS:159	Practical Cosmetology Skills I	6.0
HSC:133	First Aid/CPR	.5
PSY:112	Psychology of Human Relations	3.0
*	Computer Elective	1.5-3.0

Term Two		
COS:114	Chemical Services II	2.0
COS:119	Practical Cosmetology Skills II	7.0
COS:156	Chemical Services I	3.0
COS:160	Practical Cosmetology Skills III	7.0

Term Three		
COS:116	Salon Management	2.0
COS:121	Practical Cosmetology Skills IV	7.0

Term Four		
COS:112	Care of Skin and Scalp	2.0
COS:123	Practical Cosmetology Skills VI	7.0
COS:155	Haircutting and Styling Techniques	1.0
COS:157	Legal Aspects of Cosmetology	1.0
COS:158	Comprehensive Cosmetology Review	3.0
COS:161	Practical Cosmetology Skills V	7.0

* Computer Electives:
BCA:112, BCA:212, SDV:200

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

DAIRY SCIENCE TECHNOLOGY

Dairy production is a multi-billion dollar economic force and is key to the effort to feed an ever-increasing world population with growing food demands. NICC provides leadership in dairy science education at the world-class facility in Calmar known as the Dairy Center.

Students can expect to enter the dairy workforce after completing this two-year degree. Career options include:

- Return to and modernize family dairy operation
- Management position on modern dairy
- Industry jobs with AI firms, milk procurement organizations, and local cooperatives
- Positions working with or at veterinary clinics
- Beginning producer starting their own operation

The Dairy Center's facilities include a "dueling parlor" (half parallel-half herringbone) complete with the industry's latest advances and a 3-row, 144-stall barn equipped with slatted floors and an alley scraper for manure collection. Additionally, the spacious special-needs facility is a focal point along with a calf barn designed to maximize animal and employee performance. New in 2005, the Grazing Center demonstrates low-input dairying with its swing parlor and paddocks.

This program includes management training, classroom discussion, practical hands-on dairy lab work, and an on the job experience (internship). In addition to dairy and milk production classes, required coursework includes nutrition, health/disease, reproduction, genetics, and farm accounting/business management. The successful student will master artificial insemination, palpation, ultrasound, hoof care, intravenous treatments, vaccination, pH monitoring, CMT, milk culturing, dehorning, moisture testing and much more. Students also become proficient in dairy management software, farm cash flows, budgeting, milk marketing, job applications, and preparing a tax return.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate of Applied Science

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
AGA:114	[1]Principles of Agronomy	3.0
AGS:242	Animal Health	3.0
AGS:244	Applied Animal Disease Prevention and Treatment	2.0
AGS:335	Principles of Milk Production	3.0
AGS:340	Dairy Cattle Evaluation	3.0
ENG:021	Foundations of Writing	3.0
MAT:053	Prealgebra	4.0
Term Two		
AGA:212	Forage and Grain	4.0
AGS:101	Working with Animals	2.0
AGS:114	[2]Survey of the Animal Industry	2.0
AGS:331	Animal Reproduction	3.0
AGS:334	Applied Reproductive Techniques	2.0
AGS:337	Principles of Dairy Production	3.0
SPC:112	Public Speaking	3.0
Term Three		
AGS:803	Dairy Internship I	3.0
Term Four		
AGS:319	Animal Nutrition	3.0
AGS:326	Applied Ration Balancing and Feeding	2.0
AGS:353	Animal Genetics	3.0
AGS:354	Applied Animal Selection and Improvement	2.0
*	Humanities Elective	3.0
*	Social Science Elective	3.0
Term Five		
AGS:218	Domestic Animal Physiology	4.0
AGS:944	Animal Agriculture Seminar	1.0
BIO:248	Introduction to Bioscience Technology	4.0
*	Humanities Elective	3.0
*	Social Science Elective	3.0
*	Social Science Elective	2.0

*** Electives:**

Social Science: transfer-level ECN, GEO, POL, PSY, SOC

Humanities: transfer-level ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUS, PHI, REL

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

[1-2] **Articulation**

Articulation can be achieved by successfully passing an NICC Agriculture Department proficiency exam and taking the following at your high school:

[1] Crop Science

[2] Animal Science

Dairy Science Technology Certificates

Certificates are available to students who want to specialize in breeding, nutrition, or health. Each certificate includes 19 credits in the specific area. Students can choose to earn certificates in more than one area. These certificates are ideal for current producers looking to continue their education.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and complete a basic skills assessment prior to acceptance into the program.

AWARD

Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Dairy Breeding Specialist Certificate

		Credits
AGS:331	Animal Reproduction	3.0
AGS:334	Applied Reproductive Techniques	2.0
AGS:335	Principles of Milk Production	3.0
AGS:337	Principles of Dairy Production	3.0
AGS:340	Dairy Cattle Evaluation	3.0
AGS:353	Animal Genetics	3.0
AGS:354	Applied Animal Selection and Improvement	2.0

Dairy Feeding Specialist Certificate

		Credits
AGS:218	Domestic Animal Physiology	4.0
AGS:319	Animal Nutrition	3.0
AGS:326	Applied Ration Balancing and Feeding	2.0
AGS:335	Principles of Milk Production	3.0
AGS:337	Principles of Dairy Production	3.0
BIO:248	Introduction to Bioscience Technology	2.0

Dairy Health Specialist Certificate

		Credits
AGS:218	Domestic Animal Physiology	4.0
AGS:242	Animal Health	3.0
AGS:244	Applied Animal Disease Prevention and Treatment	2.0
AGS:335	Principles of Milk Production	3.0
AGS:337	Principles of Dairy Production	3.0
BIO:248	Introduction to Bioscience Technology	2.0

EARLY CHILDHOOD

Child care centers, preschools, kindergartens, and child development centers offer many possibilities for employment now that there is increasing recognition of the importance of early childhood training. Graduates of the Early Childhood program primarily function as assistants, teachers, or directors of child care centers and preschools. You receive preparation in the guidance and supervision of children in such activities as outdoor play, dramatic play, art, music, literature and language, science and math, health activities, and field trips. You will also develop a basic understanding of the principles of child development, safety procedures, assessment and evaluation diagnosis, communication skills, and nutritional needs. Upon graduation you will have employment opportunities nationwide.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Satisfactory physical and mental health is required. Prior to the Early Childhood Field Experience, you will be required to complete a criminal record/child and adult abuse registry check and a physical exam prior to center participation. A list of skills expected of early childhood professionals is available from counselors and advisors.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ECE:109	Orientation to Center Participation	4.0
ECE:162	Curriculum: Creative Activities	4.0
ECE:277	Early Childhood Field Experience I	2.0
ECE:278	Early Childhood Field Experience II	3.0
HSC:133	First Aid/CPR	.5
PSY:222	Child Psychology	3.0
Term Two		
ECE:133	Child Health, Nutrition, and Safety	3.0
ECE:167	Curriculum: Science and Math	2.0
ECE:249	Children's Literature	3.0
ECE:279	Early Childhood Field Experience III	6.0
*	Early Childhood Elective	3.0
Term Three		
COM:020	Communication Skills OR	3.0
ENG:105	Composition I	3.0
ECE:946	Seminar	3.0
PSY:112	Psychology of Human Relations OR	3.0
PSY:285	Education of Exceptional Learners	3.0
SOC:110	Introduction to Sociology OR	3.0
SOC:121	Sociology of Families	3.0

* Early Childhood Electives:
ECE:126, ECE:221, ECE:290

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement will be met by computer workshop activities during the Orientation to Center Participation class.

ELECTRONEURODIAGNOSTIC TECHNOLOGY

The Electroneurodiagnostic (END) Technology program between NICC and Eastern Iowa Community College (EICC) allows you to complete general education courses through NICC and transfer to EICC for program-specific coursework.

Electroneurodiagnostic Technology is the scientific field devoted to the recording and study of electrical activity of the brain and nervous system. Used for medical evaluation and research, it includes procedures that assess the function of the nervous system. Technologists record electrical activity arising from the brain, spinal cord, peripheral nerves, or somatosensory systems using a variety of techniques and equipment. Technologists also prepare patients for procedures, record electrical potentials, obtain medical histories, calculate results, and maintain equipment. They work with specially trained physicians who interpret the data and provide clinical impressions. Employment opportunities exist in hospitals, clinics, physician offices, research facilities, and epilepsy and sleep centers.

This program is fully accredited by the Joint Review Committee on Education in Electroneurodiagnostic Technology, and graduates are eligible for national examination given by the American Board of Registry of Electroneurodiagnostic Technologists (ABRET).

ENTRANCE REQUIREMENTS

You must complete an application to NICC and a basic skills assessment to take general education coursework at NICC.

A candidate for admission to the Electroneurodiagnotic Technology program at EICC (Scott Community College) must:

1. Submit the EICC admission application in person or by mail. (You will then be placed in the Pre-END category until you are officially accepted into the program.) Applications can be obtained from their Website: www.eicc.edu under "prospective students".

2. Send all high school and college transcripts to:
   Office of the Registrar
   Scott Community College
   500 Belmont Road
   Bettendorf, IA 52722

3. Call (563) 441-4088 to determine if you will need to take their college assessment test.

4. Meet the following academic requirements:
   a. High school graduate or GED of 50 percent or better.
   b. High School GPA of 2.5 or 12 semester hours of completed college work with a "C" or better.
   c. Placement test remedial work completed.

Each allied health student must have an insurance plan to cover any injury or illness requiring hospital treatment or surgery. In addition, all students are required to submit evidence of good health through a physical examination and immunization form. Proof of successful completion of a course in CPR is also required. These requirements will be due after the student starts the program.

AWARD

Associate of Applied Science Degree granted from EICC.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
END:110	*Introduction to END	4.0
END:210	*Electronics and Instrumentation	3.0
HSC:117	Basic Medical Terminology	2.5
Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
END:300	*END I	5.0
END:800	*Clinical Practicum I	4.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
Term Three		
END:320	*END II	2.0
END:820	*Clinical Practicum II	4.0
Term Four		
BIO:255	*Neuroanatomy	3.0
END:340	*END III	3.0
END:840	*Clinical Practicum III	4.0
ENG:105	Composition I	3.0
Term Five		
END:510	*Polysomnography	4.0
END:860	*Clinical Practicum IV	8.0
SPC:112	Public Speaking	3.0
Term Six		
END:410	*Evoked Potentials	2.0
END:880	*Clinical Practicum V	4.0

*Courses offered at Eastern Iowa Community College

EMERGENCY MEDICAL TECHNICIAN-PARAMEDIC

Emergency medical technician-paramedics, working under the direction of a physician (often through radio communication), recognize, assess, and manage medical emergencies of acutely ill or injured patients in prehospital and emergency care settings. EMT-paramedics work principally in advanced life-support units and ambulance services under medical supervision and direction. Some EMT-paramedics are employed by community fire and/or police departments, work for private companies, or may be community volunteers.

Paramedics work with other highly trained individuals to provide quality emergency care in the least amount of time. The AAS degree is an option for both current and potential paramedics. Paramedic training includes classroom instruction, clinical instruction, and field training.

NICC's Iowa Paramedic Program is based upon the National Registry of EMT's 1999 Intermediate Curriculum. Out-of-state students should check with their state for reciprocity.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment in reading and math. A skill-developing activity is available at no cost for those who do not meet the minimum requirements on the first testing. A current State of Iowa EMT-Basic license is required. Current physical, immunization records, and American Heart Health Care Provider CPR or American Red Cross CPR for the Professional Rescuer certification are required before attending the clinical portion of emergency services courses. Prior to the clinical experience, you will also be required to complete a criminal record/child and adult abuse registry check. You must be at least 17 years old prior to enrolling in the EMT-B or EMT-IA-P courses. Graduates will need to show proof of high school graduation or equivalent prior to taking the certification exam(s).

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade avg.) is required to graduate from the program and the college.

Suggested Course Sequence

Term One		Credits
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
EMS:212	Emergency Medical Technician - Basic	4.0
HIT:140	Medical Terminology	4.0
PNN:200	Dosage Calculations	1.0
SDV:060	Time and Stress Management	1.0
*	Computer Elective	1.0-3.0

Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
EMS:212	Emergency Medical Technician - Basic	3.0
PNN:204	Pharmacology Medications	1.0
PSY:121	Developmental Psychology	3.0
*	Communication Elective	3.0

Term Three		
PHI:105	Introduction to Ethics	3.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
*	Communication Elective	3.0

Term Four		
EMS:430	EMT - Iowa Paramedic I	7.0
SOC:208	Introduction to Cultural Anthropology OR	3.0
HUM:108	Cultural Diversity and Identity	3.0
*	General Education Elective	3.0

Term Five		
EMS:435	EMT - Iowa Paramedic II	9.0
EMS:815	Advanced Pediatric Life Support	1.0
EMS:860	Iowa Paramedic Comprehensive Review	1.5
*	General Education Elective	3.0

* General Education Electives:
Communication Electives: ENG:105, ENG:106, SPC:112
Computer Electives: BCA:100, BCA;112, BCA:212, SDV:200
General Education Electives: transfer-level ART, ASL, BIO, CHM, CLS, COM, DRA, ECN, ENG, ENV, FLS, GEO, HIS, HUM, LIT, MAT, MUS, PHI, PHS, POL, PSY, REL, SOC, SPC

**EMT-IA Paramedic I and EMT-IA Paramedic II courses are offered through the University of Iowa (UI), and are available on the ICN if enrollment levels are attained. Students enroll at UI for these courses and pay UI tuition and fees. Credits will apply toward the degree at NICC.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Emergency Medical Technician-Basic Certification Option

EMS:212	Emergency Medical Technician-Basic	7.0

Basic skills assessment not required.

ENOLOGY SPECIALIST

The Enology Specialist program offers a comprehensive examination of the field of enology (wine making) offered through the Viticulture and Enology Science and Technology Alliance (VESTA) consortium of colleges, including Northeast Iowa Community College, Missouri State University, and Shawnee (IL) Community College. The program provides the knowledge required to manufacture and produce wines of the highest quality and provide students with the science, agriculture, and business skills necessary to enhance Iowa's rapidly growing wine industry. Included is a foundation in chemistry, biology, and botany along with specific courses related to cultivar selection, soil preparation, cellar maintenance, and marketing. The program is specifically designed to include field work and laboratory practicum at local wineries.

Most of the Enology Specialist core courses are offered online through VESTA. Students interested in the Enology program should become familiar with VESTA by visiting their Website at www.vesta-usa.org

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program.

AWARD

Associate in Applied Science Degree, Diploma, Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Enology Specialist (AAS)

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
BIO:112	General Biology I	4.0
COM:723	Workplace Communications OR	3.0
SPC:112	Public Speaking	3.0
MAT:102	Intermediate Algebra	4.0
SDV:108	The College Experience	1.0
VIN:146	**Introduction to Enology	2.0
Term Two		
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
ENG:105	Composition I	3.0
PHS:166	Meteorology, Weather, and Climate	4.0
VIN:148	**Winery Sanitation	3.0
Term Three		
BIO:183	Microbiology	3.0
PHY:106	Survey of Physics	4.0
VIN:160	**Winery Equipment Operations	2.0
VIN:246	**Intermediate Enology	3.0
VIN:257	**Wine Production Internship	3.0
VIN:266	Sensory Evaluation	3.0
Term Four		
ENG:108	Composition II: Technical Writing	3.0
POL:111	American National Government	3.0
VIN:111	**Introduction to Viticulture and Vineyard Establishment OR	3.0
VIN:211	**Integrated Pest Management OR	2.0
AGA:142	Soils for Viticulture	3.0
VIN:259	**Cellar Operations Technology	2.0
VIN:268	**Wine and Must Analysis	3.0
VIN:290	Enology Safety	2.0
*	Technical Elective	3.0

* Technical Electives:
ADM:116, ADM:119, ADM:132, ADM:141, ADM:148, ADM:162, ADM:175, ADM:190, ADM:199, ADM:209, ADM:265, ADM:266, ADM:267, ADM:936, BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET:115, NET:134, NET:318, NET:320, NET:453, NET:481, NET:505, NET:946, TRV:113, TRV:114, VIN:270

** Courses completed through VESTA

Computer literacy is required as part of this major. BCA:212 will fulfill this requirement.

(Continued...)

Enology Specialist (Diploma)

Suggested Course Sequence

Term One		Credits
BIO:112	General Biology I	4.0
VIN:146	**Introduction to Enology	2.0
VIN:160	**Winery Equipment Operations	2.0
*	Communication Elective	3.0
*	Technical Elective	3.0

Term Two		
VIN:148	**Winery Sanitation	3.0
VIN:246	**Intermediate Enology	3.0
VIN:259	**Cellar Operations Technology	2.0
VIN:266	Sensory Evaluation	3.0
VIN:268	**Wine and Must Analysis	3.0
VIN:290	Enology Safety	2.0
*	Enology Elective	2.0

Term Three		
VIN:257	**Wine Production Internship	3.0

* Electives:

Communication Electives:
COM:145, COM:155, ENG:021, ENG:105, ENG:106, ENG:221, SPC:112

Enology Electives:
AGA:142, VIN:111, VIN:148, VIN:211, VIN:270, VIN:272

Technical Electives:
BIO, BUS, CHM, CLS, COM, ECN, ENG, ENV, FLS, GEO, HIS, HUM, LIT, MAT, PHI, PHS, PHY, POL, PSY, REL, SOC, SPC; three hours can be taken from BCA:112, BCA:212

** Courses completed through VESTA.

Computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the coursework.

Enology (Certificate)

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
VIN:146	**Introduction to Enology	2.0
VIN:160	**Winery Equipment Operations	2.0
VIN:266	Sensory Evaluation	3.0

Term Two		
AGA:153	Fundamentals of Soil Science	2.0
AGA:157	Soil Fertility	1.0
VIN:148	**Winery Sanitation	3.0
VIN:213	**Midwest Winery Practicum	2.0
VIN:290	Enology Safety	2.0

Term Three		
VIN:257	**Wine Production Internship	3.0

** Courses completed through VESTA.

ENTREPRENEURIAL COSMETOLOGY

(PENDING DEPT. OF EDUCATION APPROVAL)

The purpose of this program is to meet the need of licensed cosmetologists who are seeking to own and operate a small business.The degree will provide the needed training to successfully open and operate a cosmetology business.

ENTRANCE REQUIREMENTS

This program is offered as a result of a partnership with NICC and Capri Cosmetology College. Students will be required to submit a state license in Cosmetology to the NICC registrar and complete the courses listed in order to be awarded an AAS degree in the program. A minimum 2.0 cumulative GPA is required for graduation. Capri and Stewart Cosmetology students do not have to take the Communication course (COM:723) as long as they have passed all Capri communication courses (900-1, 900-2, 900-3, 900-4).

AWARD

Associate in Applied Science Degree
(see also Cosmetology Diploma and AAS Programs, pages 57-58)

LENGTH

The program is two terms and consists of 21 credit from NICC and the remaining 43 from Capri assuming the students complete the Communication requirement. Normal term schedules for those wanting to complete the program within one year are listed. In addition, these courses can be taken while enrolled at Capri or attending NICC or another cosmetology program.

Suggested Course Sequence

Term One		Credits
BUS:130	Introduction to Entrepreneurship	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:110	Introduction to Economics	3.0
*	Communication Elective	3.0

Term Two		
BIO:183	Microbiology OR	3.0
CHM:110	Introduction to Chemistry	3.0
BUS:133	Entrepreneurial Studies	3.0
MKT:110	Principles of Marketing	3.0
PSY:112	Psychology of Human Relations	3.0

* Communication Electives:
COM:723, ENG:105, SPC:112

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

FIREFIGHTING SPECIALIST

(PENDING DEPT. OF EDUCATION APPROVAL)

This program is designed for firefighters affiliated with an existing paid or volunteer fire department.

Emphasis is placed upon specialized firefighting courses offered through the Iowa Fire Service Training Bureau and the National Education Council for Agricultural Safety Center. This program will expand a firefighter's knowledge and develop leadership for emergency response.

ENTRANCE REQUIREMENTS

Current affiliation with a volunteer or paid fire department. High school graduate or equivalent.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Applied Science Degree requirements plus:

To receive an Associate in Applied Science degree, a student must complete all of the general education courses and bring in a certificate of completion for the required Firefighting courses and 5 elective Firefighting courses. Students will be given 33 credits for the required and elective Firefighting courses; 33 in addition to the 31 general education courses meets the minimum 64-credit requirement for an AAS degree.

1. A minimum of 64 credit hours, with at least 18 earned at NICC.
2. A minimum GPA of 2.0 and a passing grade in all required courses.
3. Coursework electives (articulated from the Fire Science Bureau).

The firefighting courses are offered by the Fire Science Bureau and are offered at various times and locations throughout the year.

*Offered through the Iowa Fire Service Training Bureau (or equivalent out-of-state certification)
**Offered through the National Education Council for Agriculture Safety (NECAS), Peosta, Iowa

Required Fire Science Courses:
* Essentials of Firefighting I
* Essentials of Firefighting II
* Instructional Techniques for Fire Service Training
* Hazardous Materials: Operations Level
* Driver Operator
* Technical Rescue
* Fire Department Officer I
* Fire Inspection Principles and Practices
** Technical Agricultural Rescue

In addition, at least 5 out of the following 10 courses must be taken as elective Fire Science courses:
* Fire Department Officer II
* Incident Management
* Principles of Building Construction
* Instructional Techniques for Fire Service Training II
* Incident Safety Officer
* Health and Safety Officer
* Strategy and Tactics for Initial Company Operations
* Arson Detection for First Responder
* Emergency Response to Terrorism: Basic Concepts
* EMT-B, Iowa Paramedic, Paramedic Specialist, or EMT-Intermediate (State of Iowa or National Registry)

Term One		Credits
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:120	Principles of Macroeconomics	3.0
ENG:105	Composition I	3.0
MAT:041	Basic Math or higher-level MAT	3.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0

Term Two		
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
ECN:130	Principles of Microeconomics	3.0
PHI:105	Introduction to Ethics	3.0
PHY:710	Technical Physics	3.0
SPC:112	Public Speaking	3.0

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

HEALTH INFORMATION TECHNOLOGY

The Health Information Technician is responsible for ensuring that medical information is collected and maintained for every patient. The technician also performs data analysis and research of health information to meet the needs of health care professionals.

The Health Information Technology programs prepare you to work in a variety of health care settings. If you are pursuing a health career, you have the option of choosing the Coding Specialist (diploma) or Health Information Technology (AAS). The programs contain classroom, lab, and professional practice experience.

The Health Information Technology program (AAS) is accredited by the Commission on the Accreditation for Health Informatics and Information Management (CAHIIM) in cooperation with the American Health Information Management Association's Council on Accreditation.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Current physical and immunization records are required prior to the start of the clinical affiliations. You will also be required to complete a criminal background and abuse registry checks for some clinical affiliations. A positive report may prevent you from attendance in professional practice experience and completion of program.

AWARD

Associate in Applied Science Degree, Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Health Information Technology (AAS)

The AAS option has been designed for the student who, after completing the two-year Associate of Applied Science degree, will be eligible to apply to write the national qualifying examination for certification as a Registered Health Information Technician (RHIT). This program, which contains classroom, lab, and professional practice experiences, prepares students for employment in health care settings to be responsible for maintaining the completeness of patient records.

Suggested Course Sequence

Term One		Credits
BCA:112	Introduction to Data Processing	3.0
BIO:165	Human Anatomy and Physiology I	3.0
HIT:140	Medical Terminology	4.0
HIT:320	Health Records Management	2.0
HIT:330	Health Care Delivery Systems	2.0
*	Communication Elective	3.0
Term Two		
BCA:212	Introduction to Computer Business Applications	3.0
BIO:170	Human Anatomy and Physiology II	3.0
HIT:165	Principles of Diseases	4.0
HIT:215	Introduction to CPT	2.0
HIT:230	Introduction to Medical Coding	3.0
HIT:420	Legal Aspects of Health Information	2.0
HIT:540	Professional Practice Experience I	1.5
Term Three		
BCA:213	Intermediate Computer Business Applications OR	3.0
CIS:303	Introduction to Database	3.0
HIT:240	Advanced Coding and Classification	3.0
HIT:280	CPT-4 Coding	3.0
HIT:292	Reimbursement Methodologies	2.0
HIT:351	Health Information Systems	2.0
*	Communication Elective	3.0
*	Social Science Elective	3.0
Term Four		
HIT:340	Comparative Records	2.0
HIT:445	Quality Management of Organizational Resources	4.0
HIT:450	Health Statistics	2.0
HIT:541	Professional Practice Experience II	3.0
HIT:946	Seminar	2.0

*** General Education Electives:**

Communication Electives: ENG:105, ENG:106, SPC:112

Social Science Electives: PSY:111, PSY:112, SOC:110

Students enrolled in health occupations programs must pass all required coursework with a minimum

(Continued...)

of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Coding Specialist (Diploma)

The Coding Specialist option has been designed for the student who wants to be employed in health care settings to do coding activities for health care reimbursement purposes.

This program includes classes in word processing as well as science and an understanding of medicine. You must have a working knowledge of anatomy and physiology, medical terminology, disease processes, coding classification, and reimbursement systems.

Prior to the clinical experience, you will also be required to complete a criminal/child and adult abuse registry check. A positive report may prevent attendance in professional practice experience and completion of the program. Current physical and immunization records are required prior to clinical affiliations.

The Coding Specialist program is designed to ladder into the Health Information Technology program.

Suggested Course Sequence

Term One		Credits
BIO:165	Human Anatomy and Physiology I	3.0
HIT:140	Medical Terminology	4.0
HIT:320	Health Records Management	2.0
HIT:330	Health Care Delivery Systems	2.0
*	Communication Elective	3.0
*	Computer Science Elective	3.0

Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
HIT:165	Principles of Diseases	4.0
HIT:215	Introduction to CPT	2.0
HIT:230	Introduction to Medical Coding	3.0
HIT:420	Legal Aspects of Health Information	2.0
HIT:540	Professional Practice Experience I	1.5

Term Three		
HIT:240	Advanced Coding and Classification	3.0
HIT:280	CPT-4 Coding	3.0
HIT:292	Reimbursement Methodologies	2.0
HIT:351	Health Information Systems	2.0
*	Elective	3.0

* Electives:

Communication Electives: ENG:105, ENG:106, SPC:112

Computer Elective: BCA:212 preferred

Electives: BCA:112, BCA:213, HIT:xxx, PSY:111, PSY:112, SOC:110

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

HUMAN SERVICES GENERALIST

The Human Services Generalist program prepares you to enter the workplace in a variety of human service agencies, services, and delivery systems. This two-year degree will provide a strong foundation for a professional career in the human service arena. There is a wide choice of major electives in combination with a strong human services core curriculum. Actual field experience in community human service settings is also included under the guidance of working professionals.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Prior to the field experience, you will be required to complete a criminal record/child and adult abuse registry check. A positive report may prevent you from attendance in clinical and completion of the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
HSV:150	Human Services Technology I	3.0
HSV:162	Introduction to Human Disabilities and Services	3.0
PSY:111	Introduction to Psychology	3.0
SOC:110	Introduction to Sociology	3.0
SPC:112	Public Speaking	3.0

Term Two		
ENG:105	Composition I	3.0
HSC:133	First Aid/CPR	.5
HSV:151	Human Services Technology II	3.0
HSV:250	Essentials of Behavioral Modifications	3.0
PSY:121	Developmental Psychology OR	3.0
SOC:140	Human Behavior in the Social Environment	3.0
PSY:241	Abnormal Psychology	3.0

Term Three		
HSV:225	Counseling Techniques	3.0
HSV:255	Addictive Disease Concepts	3.0
HSV:847	Human Services Field Experience I	2.5
*	General Education Elective	3.0
*	Major Elective	3.0
*	Science Elective OR	3.0
*	Math Elective	3.0-4.0

Term Four		
HSV:848	Human Services Field Experience II	1.25
HSV:849	Human Services Field Experience III	1.25
PSY:226	Psychology of Aging	3.0
*	Criminal Justice Elective OR	3.0
*	General Education Elective	3.0
*	Humanities Elective	3.0
*	Major Elective	3.0

* Electives:

General Education Electives:

Humanities Electives: ART:101, ART:203, ART:204; transfer-level ASL, DRA, CLS, FLS, HUM, LIT, MUS, PHI, REL

Math Electives: transfer-level MAT

Science Electives: transfer-level BIO, CHM, ENV, PHS, PHY

Criminal Justice Electives: CRJ:100, CRJ:120, CRJ:201

Major Electives:

ASL:131, ASL:161, CRJ:100, CRJ:120, CRJ:200, EDU:175/HSV:162, HSV:260, HSV:280, transfer-level PHI, PSY, SOC.

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Paraeducator Certification Option

For Paraeducator Certification, see Education AA, Paraeducator Certification.

HUMAN SERVICES TECHNICIAN

The Human Services Technician program is designed to prepare you for entry-level positions in community agencies and institutional settings. Basic skills essential for working with persons in need of assistance will be developed. The Human Services Technician is prepared to work in direct personal contact providing help to the person in need, generally working under the direction of a professional. Employment opportunities include, but are not limited to, paraprofessional jobs in schools and agencies serving persons with mental illness, mental retardation, physical handicaps, behavior disorders, economic deprivation, or substance abuse.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Prior to the field experience, you will be required to complete a criminal record/child and adult abuse registry check.

AWARD

Diploma

Note: Students interested in an Associate Degree should consider the Human Services Associate in Arts Degree or the Human Services Generalist Associate in Applied Science degree.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
HSC:133	First Aid/CPR	.5
HSV:150	Human Services Technology I	3.0
HSV:162	Introduction to Human Disabilities and Services	3.0
PSY:111	Introduction to Psychology	3.0
SOC:110	Introduction to Sociology	3.0
Term Two		
HSV:151	Human Services Technology II	3.0
HSV:250	Essentials of Behavioral Modifications	3.0
PSY:121	Developmental Psychology OR	3.0
SOC:140	Human Behavior in the Social Environment	3.0
PSY:226	Psychology of Aging	3.0
PSY:241	Abnormal Psychology	3.0
Term Three		
ENG:105	Composition I OR	3.0
SPC:112	Public Speaking	3.0
HSV:847	Human Services Field Experience I	2.5
HSV:848	Human Services Field Experience II	1.25
SDV:135	Job Seeking Skills	1.0

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

INDUSTRIAL ELECTRICIAN

Since the widespread application of electricity in business and industry in the 1900s, there has been an increasingly strenuous demand for trained electricians. NICC's Industrial Electrician program is designed to provide you with the knowledge and skills needed to be successful in the electrical field. You learn the basic principles of electricity in DC/AC theory, the rules set up for the industry in National Electrical Code, and the fundamental skills required by the job market in motor repair, motor control principles, solid state fundamentals, industrial principles and design, and programmable logic controllers. You acquire knowledge and skills through classroom experiences and on-site activities at a student building project.

When you graduate, you will have excellent opportunities for employment as an electrician in an educational institution, at a utility, municipal, state, or federal agency, food processing plant, manufacturing facility, and countless other businesses and industries that rely on the skills and experience of qualified electricians to troubleshoot, test, inspect, maintain, and repair electrical machinery and wiring. The excellent employment placement record (around 96 percent) for the Industrial Electrician program demonstrates that NICC graduates receive outstanding recognition and opportunity from employers as they seek their chosen career. This program is recognized by the Iowa Electrical Apprenticeship and Training Program, Associated Builders and Contractors, and the State of Minnesota Board of Electricity, which award apprenticeship credit to graduates.

ENTRANCE REQUIREMENTS

You must be a highschool graduate or equivalent and meet the minimum entrance requirement on a basic skills assessment that places you in MAT:063 Elementary Algebra or higher.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ELE:117	DC Theory (8 weeks)	5.0
ELE:118	AC Theory (8 weeks)	5.0
ELE:142	Electrical Materials Identification	1.0
HSC:133	First Aid/CPR	.5
*	General Education Elective	3.0
Term Two		
ELE:135	Electrical Installation	5.0
ELE:151	National Electrical Code I	3.0
*	General Education Electives	10.0
Term Three		
ELE:107	Electrical Blueprint Reading	3.0
ELE:146	Commercial-Residential Lab	6.0
ELE:152	National Electrical Code II	3.0
ELE:193	Motor Repair	3.0
ELE:196	Motor Control Principles	4.0
Term Four		
ELE:147	Estimating	1.0
ELE:148	Solid State Fundamentals	4.0
ELE:171	Power Systems	4.0
ELE:172	Fundamentals of Fluid Dynamics	3.0
ELE:220	Application of PLC's	6.0
*	General Education Elective	3.0

* General Education Electives:
- One Communication Elective: ENG:105
- Math Electives:
  - MAT:744 OR
  - MAT:120 AND MAT:130
- One Science Elective: PHY:106 , PHY:162
- One Social Science Elective: PSY:112 or equivalent

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

JOHN DEERE AG TECHNOLOGY

The John Deere Ag Technology program is designed to upgrade the technical competence and professional level of the incoming John Deere dealership technician. The program is supported by John Deere Company, Kansas City Branch, and operated by NICC. You will receive classroom lecture and top-notch laboratory experiences on John Deere products at the Calmar Campus and a unique opportunity to work at a John Deere dealership. The program begins in August.

Each specialized subject is studied in the classroom and laboratory on campus, followed by related work experience at the dealership. The work experience at the dealership relates as much as possible to the coursework just completed at NICC. Classroom instruction will cover the basics, as well as the latest developments in all of John Deere agricultural and consumer products.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, complete a basic skills assessment, and secure a John Deere dealer sponsor prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
AGM:500	John Deere Implement	3.0
AGM:501	John Deere Fundamentals and Safety	3.0
AGM:510	John Deere Hydraulics I	3.0
AGM:513	John Deere Electrical/Electronics I	3.0
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
*	Communication Elective	3.0

Term Two		
AGM:508	John Deere Combines	4.0
AGM:801	John Deere Internship I	11.0

Term Three		
AGM:512	John Deere Hydraulics II	3.0
AGM:516	John Deere Heating and Air Conditioning	2.0
AGM:518	John Deere Power Trains	5.0
HSC:133	First Aid/CPR	.5
PSY:112	Psychology of Human Relations	3.0

Term Four		
AGM:530	John Deere Information Technology	4.0
AGM:802	John Deere Internship II	11.0

Term Five		
AGM:504	John Deere Welding	1.0
AGM:514	John Deere Electrical/Electronics II	3.0
AGM:520	John Deere Consumer Products/Engines	3.0
AGM:522	John Deere Engines	3.0
AGM:524	John Deere Diesel and Fuel Systems/ Tractor Performance	3.0
*	General Education Elective	3.0
*	Math/Science Elective	3.0

* General Education Electives:

One Communication Elective: ENG:105, SPC:112

One Math Elective: MAT:102, MAT:744, transfer-level MAT); or transfer-level Science Elective

One General Education Elective: transfer-level ART, ASL, BIO, CHM, CLS, COM, DRA, ECN, ENG, ENV, FLS, GEO, HIS, HUM, LIT, MAT, MUS, PHI, PHS, PHY, POL, PSY, REL, SOC, SPC

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

MARKETING

The sales-oriented marketing person who performs selling functions in a professional manner ensures the repeat business of satisfied customers. Though contact with customers is a major part of all sales jobs, there are differences in the duties, skills, and responsibilities of salespeople. Appropriate merchandising, displaying, and effective personal selling are all important in a successful department store operation. Your skills are developed in these areas so that you can immediately be a valuable addition to a department store staff. Instructor-supervised work experiences are incorporated into the program. You will find career opportunities in related businesses such as apparel shops, hardware, variety, discount, and department stores.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications OR	3.0
SDV:200	Introduction to Microcomputers	1.5
BUS:103	Introduction to Business	4.0
BUS:185	Business Law I	3.0
MKT:275	Marketing Occupational Experiences I	2.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations OR	3.0
PSY:114	Motivation and Attitudes I	4.0

Term Two		
MKT:110	Principles of Marketing	3.0
MKT:140	Principles of Selling	3.0
MKT:150	Principles of Advertising	3.0
SDV:135	Job Seeking Skills	1.0
*	General Education Electives	6.0

* General Education Electives:

One Communication Elective: COM:020, COM:120, COM:145, COM:155, COM:723, ENG:013, ENG:021, ENG:105, ENG:106, ENG:108, ENG:221, SPC:112

One transfer-level General Education Elective: ART, ASL, CLS, COM, DRA, ECN, ENG, FLS, GEO, HIS, HUM, LIT, MAT, MUS, PHI, POL, PSY, REL, SOC, SPC

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

MARKETING MANAGEMENT

Marketing management personnel must work very effectively with all people. In addition, they must be adept at analyzing people's reactions to a variety of situations and govern their actions accordingly. An effective manager needs to be proficient in organizing, directing, and evaluating business activities. Oral and written communications play a vital role in transmitting product and management ideas to customers, employers, and supervisors.

This program combines classroom work and on-the-job training to teach skills needed in retail operation and management functions. You can seek employment as an owner/operator, assistant manager in retail operations, management trainee in an industrial setting, personnel manager, and many other management positions.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications OR	3.0
SDV:200	Introduction to Microcomputers	1.5
BUS:103	Introduction to Business	4.0
MKT:275	Marketing Occupational Experiences I	2.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations OR	3.0
PSY:114	Motivation and Attitudes I	4.0
*	General Education Elective	3.0

Term Two		
BUS:185	Business Law I	3.0
MKT:110	Principles of Marketing	3.0
MKT:140	Principles of Selling	3.0
MKT:150	Principles of Advertising	3.0
*	General Education Elective	3.0

Term Three		
MKT:276	Marketing Occupational Experiences II	6.0
SDV:135	Job Seeking Skills	1.0
*	Technical Elective	3.0

Term Four		
ACC:152	Financial Accounting	4.0
MGT:102	Principles of Management	4.0
MKT:277	Marketing Occupational Experiences III	2.0
PSY:214	Motivation and Attitudes II OR	4.0
MGT:170	Human Resource Management	3.0
*	General Education Elective	3.0

Term Five		
BUS:180	Business Ethics	3.0
MKT:278	Marketing Occupational Experiences IV	2.0
MKT:298	Seminar in Entrepreneurship	3.0
*	General Education Electives	6.0
*	Technical Elective	3.0

* Electives:

General Education Electives:

One Communication Elective: COM:273, transfer level COM, ENG, SPC

One Math Elective: MAT:102, MAT:744, transfer level MAT; or Science: transfer-level BIO, CHM, ENV, PHS, PHY

One Social Science Elective: transfer-level ECN, GEO, POL, PSY, SOC; or Humanities: transfer-level ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUS, PHI, REL

Two General Education Electives: transfer-level ART, ASL, CLS, COM, DRA, ECN, ENG, FLS, GEO, HIS, HUM, LIT, MAT, PHI, POL, PSY, REL, SOC, SPC

Technical Electives:

ACC, ADM, BCA, BUS, CIS, CSC, FIN, GRA, LGL, MGT, MKT, NET

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

MASSAGE THERAPY SPECIALIST

Massage is an ancient healing art that is now used to enhance the health and well-being of individuals of all ages. The massage therapist is prepared to use the principles and techniques of massage to provide therapeutic procedures in a practical situation. Mastery of these skills develop with practice and continued learning. The massage therapist will have a deeper understanding of the specialty areas of massage with a heavy emphasis on anatomy and physiology.

The Massage Therapy programs prepare you to work in a variety of health care settings. Employment opportunities include hospitals, chiropractic offices, health clubs, spas, salons, pain management centers, sports medicine, and private practice. You have the option of choosing Professional Massage Therapy (diploma) or Massage Therapy Specialist (AAS). These programs contain classroom, lab, and clinical experience.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent. You must complete a basic skills assessment in reading and meet the minimum entrance requirements prior to being accepted into the program. A skill developing activity is available at no cost if you do not meet the minimum requirements on the first testing. Students must have CPR certification prior to Practical Skills.

AWARD

Associate in Applied Science Degree, Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Massage Therapy Specialist (AAS)

The AAS option has been designed for the student who desires to practice in the setting of their choice with a high level of skill and professionalism in providing the various specialized techniques of massage. Both relaxation and therapeutic approaches to massage therapy are taught.

This program, which contains classroom, lab and clinical experience, prepares students for employment in health care settings and private practice.

Suggested Course Sequence

Term One

		Credits
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Computer Business Applications	3.0
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
HSC:133	First Aid/ CPR	.5
MST:116	Kinesiology I	2.0
MST:128	Massage I	4.0
MST:160	Legal and Ethical Issues in Massage Practice	1.5

Term Two

BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
COM:723	Workplace Communications OR	3.0
ENG:105	Composition I	3.0
MST:114	Pathology for Massage Therapy I	1.25
MST:117	Kinesiology II	2.5
MST:130	Massage II	4.0
MST:250	Massage Therapy Practical Skills I	.5

Term Three

MST:115	Pathology for Massage Therapy II	1.25
MST:125	Reflexology	1.5
MST:153	Deep Tissue Massage	3.0
MST:252	Massage Therapy Practical Skills II	1.0
MST:260	Massage Therapy Comprehensive Review	2.0

Term Four

MST:145	Massage Business Management	2.0
MST:161	Professional Boundaries in Massage Practice	1.5
MST:253	Massage Therapy Practical Skills III	1.5
PNN:270	Introduction to Nutrition	2.0
SPC:112	Public Speaking	3.0
*	General Educaton Elective	3.0

Term Five

MST:136	Massage in Special Populations	2.5
MST:166	Modalities in Massage Therapy	2.5
MST:255	Massage Therapy Practical Skills IV	1.5
*	General Education Elective	3.0
*	Social Science or Humanities Elective	3.0

(Continued...)

* Electives:
  Two General Education Electives: transfer-level ART, ASL, BIO, CHM, CLS, COM, DRA, ECN, ENG, ENV, ESL, FLS, GEO, HIS, HUM, LIT, MAT, MUS, PHI, PHS, PHY, POL, PSY, REL, SOC, SPC
  One Social Science or Humanities Electives: transfer-level ART, ASL, CLS, DRA, ECN, FLS, GEO, HIS, HUM, LIT,MUS, PHI, POL, PSY, REL, SOC

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Professional Massage Therapy (Diploma)

The Professional Massage Therapy Diploma Option is designed for the student to meet the requirements for entry-level employment as a massage therapist in health clubs, spas, salons, chiropractic offices, and private practice. Emphasis is placed on anatomy and physiology, kinesiology, ethics and law, and principles of relaxation massage.

Graduates of this program take a national certification exam. Once successfully, completed, national exam results are used to assist in the Iowa licensure process.

The Professional Massage Therapy program is designed to ladder into the Massage Therapy Specialist program.

Suggested Course Sequence

Term One		Credits
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Computer Business Applications	3.0
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
HSC:133	First Aid/ CPR	.5
MST:116	Kinesiology I	2.0
MST:128	Massage I	4.0
MST:160	Legal and Ethical Issues in Massage Practice	1.5

Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
COM:723	Workplace Communications OR	3.0
ENG:105	Composition I	3.0
MST:114	Pathology for Massage Therapy I	1.25
MST:117	Kinesiology II	2.5
MST:130	Massage II	4.0
MST:250	Massage Therapy Practical Skills I	.5

Term Three		
MST:115	Pathology for Massage Therapy II	1.25
MST:125	Reflexology	1.5
MST:153	Deep Tissue Massage	3.0
MST:252	Massage Therapy Practical Skills II	1.0
MST:260	Massage Therapy Comprehensive Review	2.0

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

MEDICAL LABORATORY TECHNICIAN

The Medical Laboratory Technician program offers you the opportunity to take two semesters of study at NICC and then a summer term and one semester at Hawkeye Community College (HCC) in Waterloo before completing the 24-week clinical internship. NICC and NIACC are academic affiliates of the MLT program at HCC.

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

Graduates of this program may take a national certification examination. Because of the increased demand for laboratory services, certified workers are needed in hospital laboratories, clinics, physicians' offices, public health agencies, research institutions, and the armed forces. Upon graduation, you may also continue your education at a four-year institution to become a medical technologist.

The Medical Laboratory Technician program is accredited by the National Accrediting Agency for Clinical Laboratory Science.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Current physical and immunization records are required prior to the start of the clinical laboratory courses. You may also be required to complete a criminal record/child and adult abuse registry check for some clinical affiliations. A positive report may prevent you from attendance in clinical and completion of the program. You may be required to take preparatory courses in math, biology, and chemistry prior to entering college courses.

AWARD

Associate in Applied Science Degree from HCC.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One***		Credits
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
HIT:140	Medical Terminology	4.0
MLT:101	**Introduction to Lab Science	2.0
SPC:112	Public Speaking	3.0

Term Two***		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
BIO:183	Microbiology	3.0
BIO:184	Microbiology Lab	1.0
ENG:105	Composition I	3.0
MLT:120	*Urinalysis	3.0
PSY:111	Introduction to Psychology OR	3.0
SOC:110	Introduction to Sociology	3.0

Summer session and second year are completed with Hawkeye Community College

Term Three		
MLT:110	Fundamental Lab Techniques	3.0
MLT:130	Hematology	3.0
MLT:250	Clinical Microbiology	4.0

Term Four		
MLT:130	Advanced Hematology	3.0
MLT:233	Hemostasis and Thrombosis	2.0
MLT:240	Clinical Chemistry I	7.0
MLT:252	Parasitology	1.0
MLT:260	Immunohematology I	4.0
MLT:270	Immunology and Serology	2.0

Term Five		
MLT:283	Clinical Practicum: Urinalysis	1.0
MLT:284	Immunohematology	2.0
MLT:285	Clinical Practicum: Chemistry	4.0
MLT:286	Clinical Practicum: Immunology and Serology	1.0
MLT:287	Clinical Practicum: Hematology	4.0
MLT:288	Clinical Practicum: Microbiology	4.0
MLT:291	Lab Survey and Review	1.0

*May be available on each campus, or offered jointly by any or all schools participating in this shared program.

**Term 1: BIO:163 may be taken at HCC in place of BIO:165 and BIO:167 at NICC.
Term 2: BIO:113 or CHM:132 may be taken at HCC in place of BIO:170 and BIO:172 at NICC.

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is required for graduation. This requirement may be met by completion of a high school or college computer literacy course acceptable to the department or completion of a proficiency exam.

MEDICAL TRANSCRIPTIONIST

Medical transcriptionists translate and edit recorded dictation by physicians and other health care providers regarding patient assessment and treatment. To understand and accurately transcribe reports, you must understand the language of medicine, human biology, diagnostic procedures and treatment. You will transcribe the dictated reports and return them in either printed or electronic form to the dictator for review and signature or correction. These reports eventually become a part of the patient's permanent file.

The program includes classes in word processing as well as science and medical terminology. In addition, this program, which contains classroom and lab experiences, will prepare you for employment in physicians' offices and health care facilities, and you may be able to work at home.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ADM:116	Keyboarding II	3.0
BIO:165	Human Anatomy and Physiology I	3.0
HIT:140	Medical Terminology	4.0
HIT:320	Health Records Management	2.0
HIT:330	Health Care Delivery Systems	2.0
*	Communication Elective	3.0
Term Two		
ADM:119	Keyboarding III	3.0
BIO:170	Human Anatomy and Physiology II	3.0
HIT:165	Principles of Diseases	4.0
HIT:420	Legal Aspects of Health Information	2.0
HIT:603	Medical Transcription	4.0
Term Three		
BCA:212	Introduction to Computer Business Applications	3.0
MTR:145	Advanced Medical Transcription	4.0
*	Social Science Elective	3.0

*** Electives:**

One Communication Elective: ENG:105, ENG:106, SPC:112

One Social Science Elective: PSY:111, PSY:112, SOC:110

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program, the computer literacy requirement is built into the program coursework.

Nail Technology Certificate

The Nail Technology Certificate program presents a comprehensive study and implementation of the art of manicuring, pedicure, artificial nails, and nail art. The program is designed to include a sound foundation of sanitary and safety practices for the student and consumer, basic structures and functions of anatomy and physiology of the human body, disorders and diseases as they relate to the practice of nail technology, scientific backgrounds, and business practices incorporating Iowa laws. The Nail Technology Certificate program includes effective verbal and written communication practices. The student will have an understanding of appropriate hygiene and good grooming practices.

Throughout the program the student will gain a foundation and understanding in which to learn and apply the art of nail technology and nail services. The protection of the student and the public will be emphasized along with the correct introduction and application of products.

Employment opportunities include salons, spas, health clubs, and private businesses. Upon successful completion of the Nail Technology Certificate program, the student will be required to take the Iowa State Board Examination.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and must complete a basic skills assessment prior to being accepted into the program.

AWARD

Certificate

LENGTH

The length of the Certificate will depend upon your educational preparation and the course load you carry.

Curriculum

		Credits
COS:110	Basic Principles of Cosmetology	4.0
COS:112	Care of Skin and Scalp	2.0
COS:114	Chemical Services II	2.0
COS:116	Salon Management	2.0
COS:157	Legal Aspects of Cosmetology	1.0
COS:802	Practical nail TEchnology Skills I	3.5
HSC:133	First Aid/CPR	.5

OFFICE TECHNOLOGY

The office assistant plays an important role in the operation of a successful business and often holds positions involving considerable responsibility. This program offers two options: general and medical.

Duties include organizing the office, typing, taking dictation, transcribing, handling correspondence, sorting mail, filing, answering the telephone, greeting customers, operating a variety of office machines, making travel arrangements, scheduling appointments, and maintaining records. The office assistant is able to interpret the needs of the employer, maintain poise and friendliness, and apply good human relation skills at all times.

Employment opportunities include: secretary, stenographer, clerk, receptionist, record keeper, or information processor.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

General (Diploma)

Term One		Credits
ADM:116	Keyboarding II	3.0
ADM:132	Business Math and Calculators	2.0
ADM:162	Office Procedures	3.0
ADM:175	Records and Database Management	2.0
BCA:112	Introduction to Data Processing	3.0
BCA:212	Introduction to Computer Business Applications	3.0
*	General Education Elective	3.0
Term Two		
ACC:111	Introduction to Accounting OR	3.0
ACC:152	Financial Accounting	4.0
ADM:119	Keyboarding III	3.0
ADM:148	Transcription	2.0
ADM:265	Supervised Practical Experience	2.0
ADM:266	Supervised Practical Experience Module-General Emphasis	1.0
BCA:213	Intermediate Computer Business Applications	3.0
*	General Education Elective	3.0
Term Three		
ADM:141	Desktop Publishing	2.0
BUS:112	Business Math OR	3.0
*	Math/Science Elective	3.0
SDV:135	Job Seeking Skills	1.0
*	General Education Elective	3.0

* General Education Electives:

Two Communication Electives: COM:020, COM:120, COM:145, COM:155, COM:723, ENG:013, ENG:021, ENG:105, ENG:106, ENG:108, ENG:221, SPC:112 (One Communication Elective must be COM:723 or transfer-level COM, ENG, or SPC for Administrative Assistant.)

Math/Science Electives: Any non-developmental elective in BIO, CHM, ENV, MAT, PHS, PHY

Social Science Elective: PSY:112

Medical (Diploma)

Term One		Credits
ADM:116	Keyboarding II	3.0
BCA:212	Introduction to Computer Business Applications	3.0
HIT:140	Medical Terminology	4.0
HIT:320	Health Records Management	2.0
HIT:330	Health Care Delivery Systems	2.0
*	General Education Elective	4.0
Term Two		
ACC:111	Introduction to Accounting OR	3.0
ACC:152	Financial Accounting	4.0
ADM:162	Office Procedures	3.0
ADM:190	Billing for Medical Office	2.0
BCA:213	Intermediate Computer Business Applications OR	3.0
ADM:119	Keyboarding III	3.0
HIT:420	Legal Aspects of Health Information	2.0
HIT:603	Medical Transcription	4.0
Term Three		
ADM:265	Supervised Practical Experience	2.0
ADM:266	Supervised Practical Experience Module-General Emphasis	1.0
SDV:135	Job Seeking Skills	1.0
*	General Education Electives	6.0

* General Education Electives:

Two Communications Electives: COM:020, COM:120, COM:145, COM:155, COM:723, ENG:013, ENG:021, ENG:105, ENG:106, ENG:108, ENG:221, SPC:112 (One Communication Elective must be COM:723 or transfer-level COM, ENG or SPC for Administrative Assistant)

Science Electives: BIO:165 and BIO:167 AND BIO:170 and BIO:172 OR BIO:157

Social Science Elective: PSY:112

The computer literacy requirement is built into the program coursework.

PRACTICAL NURSING

This program of classroom, lab, and clinical experience will prepare you for employment in hospitals, nursing homes, and a variety of other health care facilities. The Practical Nurse gives nursing care to patients under the supervision of the Registered Nurse (RN). You assist RNs in providing care to patients in more complex situations. Following successful completion of the program, you are eligible to write the National Licensure Examination (NCLEX) to become a Licensed Practical Nurse (LPN).

Nursing courses with a clinical component may not be taken by a person who has been denied nursing licensure by a board of nursing; whose nursing license is currently suspended, surrendered, or revoked in any U. S. jurisdiction; whose nursing license/registration is currently suspended, surrendered, or revoked in another country due to disciplinary action.

CLASS HOURS

Classes are scheduled two or three days a week at the campus. Clinical experiences are scheduled the remaining days in hospitals, nursing homes, and other care settings and can occur on either the day or evening shift. An evening/weekend program option is available beginning each fall semester. For further information, contact the NICC Admissions Office.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment in reading and math and have passed Human Anatomy and Physiology I with lab component with a C- or above prior to being accepted into the program. A skill developing activity is available at no cost if you do not meet the minimum requirements on the first testing. Students may transfer into the freshman year only after transcript review, space availability, and Dean of Health approval. All nursing students are <u>required</u> to attend a program orientation prior to entrance into the program. Notification of dates and times will occur after acceptance to the Nursing program. In addition, the following requirements must be satisfied <u>prior to or during term one</u> of NICC's Nursing program.

Nursing Concepts is in term two of the Nursing program and is the first clinical course. If any of the following are not completed prior to starting Nursing Concepts, your opening in the program will be forfeited and offered to another student. The student who does not successfully satisfy the program requirements listed below will be placed at the bottom of the waiting list after submission of the required paperwork.

- Completion, with a grade of C- or better, of the following general education courses:
  - Human Anatomy and Physiology II with lab
  - Dosage Calculations
- Submission of current physical and immunization records.
- *Completion of an American Heart Association HealthCare Provider CPR or American Red Cross CPR for the Professional Rescuer certification. A copy of your current CPR certification must be submitted.
- Clearance on a criminal, dependent adult and child abuse background screening. You will receive information regarding the screenings after acceptance into the Nursing program. Note: A positive report may prevent you from attendance in clinical and completion of the program.
- *Successful completion of a 75-hour Certified Nurse Aide (CNA) course from a community college or an approved CNA course provider. A copy of your certificate must be submitted. Please contact NICC Continuing Education, 563-562-3263 ext. 399, to arrange a course.
- *Completion of the written and skill competency tests for the CNA registry. A copy of your CNA registry results must be submitted.

Items indicated with an * may be submitted immediately. Verification materials should be submitted to:

Northeast Iowa Community College
Health Department Secretary
P.O. Box 400
Calmar, IA 52132

You may be required to provide documentation of health insurance coverage and undergo drug screening. Please be aware of the following physical demands during your clinical education courses. Daily activities require bending, stooping, squatting, reaching, pushing, and pulling in all directions. You will be asked to lift and carry objects weighing up to a minimum of 50 pounds and also shared weight. Clinical tasks require use of hands for repetitive action such as simple and firm grasping and fine manipulation and walking, including stair stepping. You may also be in contact with communicable diseases and chemical/biohazardous materials and odors. For clinical assessments, visual

and hearing acuity is essential. Travel to clinical sites in outlying areas will be required at times throughout the program. Students are responsible for any travel costs. You will need to show proof of high school graduation or equivalent prior to taking the NCLEX licensure exam. The Iowa Board of Nursing will no longer review criminal history prior to application for licensure.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested course sequence

(For summer entry)

		Credits
Term One		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
ENG:105	Composition I	3.0
PNN:200	Dosage Calculations	1.0
Term Two		
PNN:174	Nursing Concepts	7.0
PNN:204	Pharmacology Medications	1.0
PNN:270	Introduction to Nutrition	2.0
PNN:527	Nursing Care of Adults I	3.5
PSY:121	Developmental Psychology	3.0
Term Three		
PNN:529	Dimensions of Practical Nursing	4.25
PNN:410	Nursing Care of Children	2.0
PNN:432	Nursing Care of the Childbearing Family	2.25
PNN:528	Nursing Care of Adults II	6.0

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

NOTE: The following year rules exist for nursing program coursework. If exceeded, the course(s) will need to be repeated. Nursing courses and Anatomy and Physiology courses cannot be greater than five years old.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

VITICULTURE TECHNOLOGY

The Viticulture Technology program provides a comprehensive examination of the field of viticulture (grape growing) offered through the Viticulture and Enology Science and Technology Alliance (VESTA) consortium of colleges including Northeast Iowa Community College, Missouri State University, and Shawnee (IL) Community College. The program provides the knowledge required to maintain vineyards in Iowa and the Midwest, with specific attention given to varietal selection, soil preparation, pest management, and marketing, as well as the science, agriculture, and business skills necessary to succeed in Iowa's rapidly growing viticulture business. The program is specifically designed to include field work and laboratory practicum at local vineyards.

Most of the Viticulture Technology core courses are offered online through VESTA. Students interested in the Viticulture program should become familiar with VESTA by visiting their Website at www.vesta-usa.org

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree, Diploma, Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Viticulture Technology (AAS)

Suggested Course Sequence

Term One		Credits
BIO:112	General Biology I	4.0
COM:723	Workplace Communication OR	3.0
SPC:112	Public Speaking	3.0
MAT:102	Intermediate Algebra	4.0
SDV:108	The College Experience	1.0
VIN:111	**Introduction to Viticulture and Vineyard Establishment	3.0
Term Two		
AGA:142	Soils for Viticulture	3.0
BCA:212	Introduction to Computer Business Applications	3.0
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
ENG:105	Composition I	3.0
VIN:113	**Winter/Spring Viticulture Technology	3.0
Term Three		
VIN:115	**Summer/Fall Viticulture Technology	3.0
*	Technical Elective	3.0
Term Four		
AGR:157	**Principles of Agricultural Mechanization	3.0
BIO:125	Plant Biology	4.0
BUS:211	Business Statistics	4.0
PHY:106	Survey of Physics	4.0
VIN:211	**Integrated Pest Management	2.0
Term Five		
ENG:108	Composition II: Technical Writing	3.0
POL:111	American National Government	3.0
VIN:146	**Introduction to Enology	2.0
VIN:190	Viticulture Safety	1.0
VIN:213	**Midwest Vineyard Management	2.0
VIN:266	Sensory Evaluation	3.0

* Technical Electives:
ADM:116, ADM:119, ADM:132, ADM:141, ADM:148, ADM:162, ADM:175, ADM:190, ADM:199, ADM:209, ADM:265, ADM:266, ADM:267, ADM:936, BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET:115, NET:134, NET:318, NET:320, NET:453, NET:481, NET:505, NET:946, TRV:113, TRV:114

** Courses completed through VESTA

Computer literacy is required as part of this major. BCA:212 will fulfill this requirement.

Viticulture Technology (Diploma)

Suggested Course Sequence

Term One		Credits
BIO:125	Plant Biology	4.0
VIN:111	**Introduction to Viticulture and Vineyard Establishment	3.0
VIN:211	**Integrated Pest Management	2.0
*	Communication Elective	3.0
*	Elective	3.0
Term Two		
AGA:142	Soils for Viticulture	3.0
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
VIN:113	**Winter/Spring Viticulture Technology	3.0
VIN:190	Viticulture Safety	1.0
VIN:213	**Midwest Vineyard Management	2.0
*	Viticulture Elective	2.0
Term Three		
VIN:115	**Summer/Fall Viticulture Technology	3.0

* Electives:

Communication Electives:
COM:145, COM:155, ENG:021, ENG:105, ENG:106, ENG:221, SPC:112

Electives:
ART, ASL, BIO, CHM, CLS, COM, DRA, ECN, ENG, ENV, FLS, GEO, HIS, HUM, LIT, MAT, MUA, MUS, PHI, PHS, PHY, POL, PSY, REL, SOC, SPC; and/or Life Skills; three hours can be taken from BCA:112, BCA:212

Viticulture Electives:
VIN:146, VIN:266, VIN:270, VIN:272

** Courses completed through VESTA

Computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the coursework.

Viticulture Technology (Certificate)

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
VIN:111	**Introduction to Viticulture and Vineyard Establishment	3.0
VIN:211	**Integrated Pest Management	2.0
Term Two		
AGA:142	Soils for Viticulture	3.0
VIN:113	**Winter/Spring Viticulture Technology	3.0
VIN:190	Viticulture Safety	1.0
VIN:213	**Midwest Vineyard Management	2.0
Term Three		
VIN:115	**Summer/Fall Viticulture Technology	3.0

** Courses completed through VESTA

WEB DESIGN TECHNICIAN

The Internet has rapidly become a significant communication vehicle for business, industry, and individual users. Web design technicians are an integral part of this growing technology. As an employee in business and industry, you will be able to create, maintain, and update your company's Website. Or perhaps you have your sights set on starting your own Web business or Web design consulting firm? Either way, the Web Design Technician program prepares you for this fascinating career.

This certificate program offers you hands-on experience in creating Web pages. You will learn the basics of HTML coding, Java Script and Perl programming languages, creating graphics for the Web environment, Web security, and e-commerce. This program helps you develop the skills needed for immediate employment or it can be an introduction to more in-depth education in this field.

People who can create Web pages are, and will continue to be, in demand as this technology continues to expand.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and must complete a preliminary skills assessment prior to being accepted into the program which includes basic computer skills.

AWARD

Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

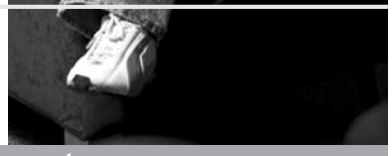
Suggested Course Sequence

Term One		Credits
CIS:125	Introduction to Programming Logic w/Language	3.0
CIS:207	Fundamentals of Web Programming	3.0
GRA:168	Creating Web Graphics	2.0
NET:248	Cisco Discovery: Networking for Home and Small Business	3.0

Term Two		
CIS:214	Server Side Web Programming	2.0
CIS:223	Adobe Web Design	4.0
CIS:235	Website Management and Web Security	2.0
CIS:271	Principles of E-Commerce OR	2.0
MKT:120	Electronics Marketing	3.0

Programs
Peosta Campus

Index of Degrees, Diplomas, and Certificates



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2008-2009

Index of Degrees, Diplomas and Certificates – Peosta Campus

Arts & **Sciences**

(AA=Associate in Arts; AS=Associate in Science)
General Education Core Courses
Associate in Arts Degree, General (AA)
Associate in Science Degree, General (AS)
Agriculture (AS)
Business Administration (AA)
Communication (AA)
Community and Regional Planning (AA)
Criminal Justice (AA)
Early Childhood (AA)
Education (AA) (Paraeducator)
Entrepreneurial Studies (AA)
Human Services (AA)
Law Enforcement (AA)
Legal Assistant/Paralegal (AA)
Management Information Systems

student driven...community focused

2008-2009

General Education Core Courses
(Applicable to Associate degree requirements)

Communication		Semester Credits
COM:120	Organizational Communication	3
COM:140	Introduction to Mass Media	3
COM:145	Public Relations Media	3
COM:155	Newspaper Production	3
ENG:105	Composition I	3
ENG:106	Composition II	3
ENG:108	Composition II: Technical Writing	3
ENG:221	Creative Writing	3
SPC:112	Public Speaking	3

Humanities		Semester Credits
ART:101	Art Appreciation	3
ART:120	Two-Dimensional Design	3
ART:123	Three-Dimensional Design	3
ART:133	Drawing	3
ART:134	Drawing II	3
ART:203	Art History I	3
ART:204	Art History II	3
ASL:131	American Sign Language I	3
ASL:161	American Sign Language II	3
ASL:241	American Sign Language III	3
ASL:271	American Sign Language IV	3
CLS:150	Latin American History and Culture	3
CLS:170	Russian History and Culture	3
DRA:112	American Film	3
FLS:141	Elementary Spanish I	4
FLS:142	Elementary Spanish II	4
FLS:241	Intermediate Spanish I	4
FLS:242	Intermediate Spanish II	4
HIS:131	World Civilization I	3
HIS:132	World Civilization II	3
HIS:151	U.S. History to 1877	3
HIS:152	U.S. History since 1877	3
HIS:214	Russian History and Culture	3
HIS:247	Study Abroad: British Life and Culture	3
HIS:248	Study Abroad: History of Cambridge, England	3
HUM:108	Cultural Diversity and identity	3
HUM:116	Encounters in Humanities	3
HUM:125	Broadway Musical History	3
HUM:130	Holocaust Perspectives: Confronting the Future	3
HUM:140	Shakespeare: Dramatist, Psychologist, Historian	3
HUM:170	Introduction to Women's Studies	3
LIT:101	Introduction to Literature	3
LIT:142	Major British Writers	3
LIT:145	Shakespeare: Dramatist, Psychologist, Historian	3
LIT:186	Cultures Through Literature	3
MUS:100	Music Appreciation	3
MUS:102	Music Fundamentals	3
MUS:120	Music Theory I	3
MUS:140	Concert Choir	1
PHI:101	Introduction to Philosophy	3
PHI:105	Introduction to Ethics	3
REL:105	Introduction to Religion	3

Math		Semester Credits
MAT:110	Math for Liberal Arts	3
MAT:120	College Algebra	3
MAT:128	Precalculus	4
MAT:130	Trigonometry	3
MAT:140	Finite Math	3
MAT:156	Statistics	3
MAT:210	Calculus I	4
MAT:216	Calculus II	4
MAT:219	Calculus III	4

Science		Semester Credits
BIO:112	General Biology I	4
BIO:113	General Biology II	4
BIO:125	Plant Biology	4
BIO:157	Human Biology	4
BIO:165	Human Anatomy and Physiology I	3
BIO:167	Human Anatomy and Physiology I Lab	1
BIO:170	Human Anatomy and Physiology II	3
BIO:172	Human Anatomy and Physiology II Lab	1
BIO:183	Microbiology	3
BIO:184	Microbiology Lab	1
BIO:190	Introductory Biotechnology	3
BIO:248	Introduction to Bioscience Technology	4
CHM:110	Introduction to Chemistry	3
CHM:111	Introduction to Chemistry Lab	1
CHM:160	Chemistry I	3
CHM:161	Chemistry I Lab	1.5
CHM:170	Chemistry II	3
CHM:171	Chemistry II Lab	1.5
CHM:262	Organic Chemistry I	4.5
ENV:115	Environmental Science	3
ENV:116	Environmental Science Lab	1
ENV:140	Natural Resource Conservation	4
PHS:142	Principles of Astronomy	3
PHS:143	Principles of Astronomy Lab	1
PHS:166	Meteorology, Weather, and Climate	4
PHS:170	Physical Geology	3
PHS:171	Physical Geology Lab	1
PHY:106	Survey of Physics	4
PHY:162	College Physics I	4
PHY:172	College Physics II	4

Social Sciences		Semester Credits
ECN:110	Introduction to Economics	3
ECN:120	Principles of Macroeconomics	3
ECN:130	Principles of Microeconomics	3
GEO:121	World Regional Geography	3
POL:111	American National Government	3
PSY:111	Introduction to Psychology	3
PSY:112	Psychology of Human Relations	3
PSY:121	Developmental Psychology	3
PSY:221	Early Child Psychology	3
PSY:222	Child Psychology	3
PSY:226	Psychology of Aging	3
PSY:241	Abnormal Psychology	3
PSY:251	Social Psychology	3
PSY:261	Human Sexuality	3
PSY:281	Educational Psychology	3
PSY:285	Education of Exceptional Learners	3
PSY:294	Crisis Intervention	3
SOC:110	Introduction to Sociology	3
SOC:115	Social Problems	3
SOC:120	Marriage and the Family	3
SOC:140	Human Behavior in the Social Environment	3
SOC:208	Introduction to Cultural Anthropology	3
SOC:209	Archeology	3
SOC:261	Human Sexuality	3

ASSOCIATE IN ARTS DEGREE (AA) - GENERAL

The Associate in Arts Degree program provides a course of study which, if satisfactorily completed, will readily transfer to most colleges and universities. College parallel-transfer curricula permit completion of the equivalent of the first two years of a bachelor's degree program in numerous institutions.

General education core courses completed for the degree are useful to you, regardless of whether you terminate your formal education at NICC or continue your formal education at another college.

If you plan to transfer to a four-year college, you should select courses to satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

The Associate in Arts degree is a useful beginning if you seek a professional degree in business, education, engineering, social work, and other areas.

GENERAL DEGREE REQUIREMENTS

1. A minimum of 64 credit hours. Note: Students not ready to begin college/transfer level writing and math courses may need additional prerequisite coursework that requires them to exceed the 64 credit hours minimum.
2. A 2.0 cumulative grade point average and a passing grade in all required courses.
3. At least 18 credit hours must be earned at NICC. Individual departments may require specific courses to meet this requirement.
4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with BCA:112, BCA:212, SDV:200 or as prescribed by specific majors.

ENTRANCE REQUIREMENTS

You must have the ability and interest to benefit from the program. A basic skills assessment must be completed prior to being accepted into the program.

AWARD

Associate in Arts Degree (AA)

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Specific Requirements for the Associate in Arts Degree

1. Complete the general degree requirements described earlier.
2. Meet minimum general education core requirements in each of the following areas:

		Credits
a.	Communication (ENG:105, SPC:112, and ENG:106 or ENG:108)	9.0
b.	Math (transfer-level MAT) and Science (transfer-level BIO, CHM, ENV, PHS, PHY) (minimum of one math and one science course)*	9.0
c.	Social Science (transfer-level ECN, GEO, POL, PSY, SOC)**	9.0
d.	Humanities (transfer-level ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL)** One of the following history courses is required: ART:203, ART:204, HIS:131, HIS:132, HIS:151, HIS:152, HIS:214/CLS:170. A minimum of 3 semester hours of literature is required: LIT:101, LIT:142, LIT:145, LIT:186	12.0
e.	Additional hours in any combination from the above subject areas	5.0

3. Remaining Requirements

   These hours will be elective courses designed for transfer. A maximum of 4 hours of developmental or non-transfer courses in the arts and sciences (Communication: COM, ENG, ESL, SPC; Math: MAT; Science: BIO, CHM, ENV, PHS, PHY, SCI; Social Science: ECN, GEO, POL, PSY, SOC; Humanities: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL) and Life Skills may be applied toward meeting the 64 credits required for the degree. A maximum of 16 hours of non-transfer level vocational-technical credits may also be used. (See the Course Classification System guide.)

*Science courses must include a lab component.
**Select courses from at least two different disciplines in this teaching area.

ASSOCIATE IN SCIENCE DEGREE (AS) - GENERAL

The Associate in Science Degree is primarily designed to enable you to transfer your work to a four-year college or university for the purpose of earning a baccalaureate degree. This degree program also offers opportunities for personal enrichment or career enhancement and provides a foundation in mathematics and science designed for transfer in a prescribed area of specialization. You should choose an intended major at a transfer institution as soon as possible and select courses which are required for your major.

GENERAL DEGREE REQUIREMENTS

1. A minimum of 64 credit hours. Note: Students not ready to begin college/transfer level writing and math courses may need additional prerequisite course work that requires them to exceed the 64 credit hours minimum.
2. A 2.0 cumulative grade point average and a passing grade in all required courses.
3. At least 18 credit hours must be earned at NICC. Individual departments may require specific courses to meet this requirement.
4. Demonstrated computer literacy is a requirement for graduation. This requirement may be met with BCA:112, BCA:212, SDV:200, or an equivalent course or as prescribed by specific majors.

ENTRANCE REQUIREMENTS

You must have the ability and interest to benefit from the program. A basic skills assessment must be completed prior to being accepted into the program.

AWARD

Associate in Science Degree (AS)

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Specific Requirements for the Associate in Science Degree

1. Complete the general degree requirements described earlier.
2. Meet minimum general education core requirements in each of the following areas:

		Credits
a.	Communication (ENG:105, SPC:112, and ENG:106 or ENG:108)	9.0
b.	Math (transfer-level MAT) and Science (transfer-level BIO, CHM, ENV, PHS, PHY)*	14.0
c.	Social Science (transfer-level ECN, GEO, POL, PSY, SOC)**	9.0
d.	Humanities (transfer-level ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL)** One of the following history courses is required: ART:203, ART:204, HIS:131, HIS:132, HIS:151, HIS:152, HIS:214/CLS:170.	6.0

3. Remaining Requirements:
   This area must include at least 10 hours of transfer-level coursework. A maximum of 4 hours of developmental or non-transfer courses in the arts and sciences (Communication: COM, ENG, ESL, SPC; Math: MAT; Science: BIO, CHM, ENV, PHS, PHY, SCI; Social Science: ECN, GEO, POL, PSY, SOC; Humanities: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUA, MUS, PHI, REL) and Life Skills may be applied toward meeting the 64 credits required for the degree. A maximum of 16 hours of non-transfer level vocational-technical credits may also be used. (See the Course Classification System guide.)

*Science course must include a lab component.
**Select courses from two different disciplines

AGRICULTURE (AS)

The Associate in Science with an Agriculture concentration provides a course of study which will readily transfer to many agricultural baccalaureate majors. Your college courses may satisfy the first two years of a bachelor's degree depending on the college to which you plan to transfer.

If you are working toward an Associate in Science degree, take courses in science, communication, math, humanities, social science, and the required agriculture subject areas. The arts and science courses completed for the degree are useful whether you continue your formal education at a four-year college or enter the workforce.

NICC's program is articulated with Iowa State University. When planning to transfer to any other four-year college, you should select courses to satisfy requirements of that specific institution. Consult an advisor on specific general education requirements.

The Associate in Science degree is a good foundation for a professional degree in agriculture business, agricultural studies, agronomy, animal science, dairy science, and other agriculture-related curriculum.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Science Degree requirements (page 92), plus:

		Semester Credits
AGA:114	Principles of Agronomy	3.0
AGS:114	Survey of the Animal Industry	2.0
ECN:110	Introduction to Economics OR	3.0
ECN:130	Principles of Microeconomics	3.0
HIS:151	U.S. History to 1877	3.0
MAT:120	College Algebra OR	3.0
MAT:140	Finite Math	3.0
MAT:156	Statistics	3.0
PHI:101	Introduction to Philosophy OR	3.0
PHI:105	Introduction to Ethics	3.0
	Agriculture Elective	3.0
	Agriculture Electives (transfer-level)	6.0
	Biology Elective (transfer-level)	4.0
	Chemisty Elective (transfer-level)	3.0
	Chemistry Lab Elective (transfer-level)	1.0

Computer Electives:
BCA:112, BCA:212

General Electives:
Visit with your advisor for suggested electives for your major.

May include career education credits.
All electives need to be transferable.

BUSINESS ADMINISTRATION (AA)

The Associate in Arts with a concentration in Business Administration provides a course of study which will readily transfer to most four-year colleges and universities. College courses permit completion of the equivalent of the first two years of a bachelor's degree in many four-year colleges. If you are working toward the Business Administration concentration, take courses in science, communication, math, humanities, social science, and the required business subject areas.

The general education courses completed for the degree are useful whether you continue your formal education at a four-year college or enter the workforce. The Associate in Arts with a concentration in Business Administration is a useful beginning if you plan to get a professional degree in accounting, finance, management, marketing, human resources, business education, or computer science.

If you plan to transfer to a four-year college, you should select courses to satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 91), plus:

		Semester Credits
ACC:152	Financial Accounting	4.0
ACC:156	Managerial Accounting	4.0
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:120	Principles of Macroeconomics	3.0
ECN:130	Principles of Microeconomics	3.0
MAT:156	Statistics	3.0

Business Electives: (9 credits)
Transfer-level ACC, BCA, BUS, CIS, FIN, LGL, MGT, MKT, NET

COMMUNICATION (AA)

The Associate in Arts in Communication is a useful beginning if you desire a professional degree in media, public relations, journalism, business, education, and other communications-related areas. Journalists, technical writers, personnel directors, and media specialists need strong communication skills.

This program will prepare you to enter the workforce in local businesses or transfer to a four-year college or university to obtain a baccalaureate degree in a communications or related area.

If you plan to transfer to a four-year college, select courses to satisfy the requirements of your prospective institution. Consult your advisor at the four-year institution to which you intend to transfer with questions about course selection.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

ARTICULATION AGREEMENTS

An articulation agreement is in effect with Wartburg College.

Curriculum

Associate in Arts Degree requirements (page 91), plus:

		Semester Credits
BCA:212	Introduction to Computer Business Applications	3.0
COM:120	Organizational Communication	3.0
COM:140	Introduction to Mass Media	3.0
ENG:106	Composition II AND	3.0
ENG:108	Composition II: Technical Writing	3.0
HUM:108	Cultural Diversity and Identity	3.0
PHI:105	Introduction to Ethics	3.0
PSY:112	Psychology of Human Relations	3.0
*	Communication-Related Electives	15.0

*Communication-Related Electives: Students are urged to work with their academic advisor in the selection of electives to best match career or transfer choice.)

ASL:131	American Sign Language I	3.0
ASL:161	American Sign Language II	3.0
ASL:241	American Sign Language III	3.0
ASL:271	American Sign Language IV	3.0
CIS:205	Fundamentals of Web Programming OR	2.0
CIS:207	Fundamentals of Web Programming OR	3.0
CIS:223	Adobe Web Design	4.0
COM:145	Public Relations Media	3.0
COM:155	Newspaper Production	3.0
COM:936	Occupational Experience	3.0
DRA:112	American Film	3.0
ENG:221	Creative Writing	3.0
FLS:141	Elementary Spanish I	4.0
FLS:142	Elementary Spanish II	4.0
FLS:241	Intermediate Spanish I	4.0
FLS:242	Intermediate Spanish II	4.0
HUM:140	Shakespeare: Dramatist, Psychologist, Historian	3.0
LIT:101	Introduction to Literature	3.0
LIT:142	Major British Writers	3.0
LIT:145	Shakespeare: Dramatist, Psychologist, Historian	3.0
LIT:186	Cultures Through Literature	3.0
MKT:150	Principles of Advertising	3.0

COMMUNITY AND REGIONAL PLANNING (AA)

Community and regional planning is concerned with the economic, social, environmental, psychological, and management aspects of change in a geographic or political area. Planners must attain a broad comprehension of city, metropolitan, urban, rural, regional, and statewide types of development, their interrelationships, and the extent of their changing needs over the short- and long-range future.

This program articulates into the Community and Regional Planning major in the College of Design at Iowa State University and is one of only twelve programs in the U.S. accredited by the Planning Accreditation Board. NICC students will have the opportunity to take two Iowa State courses over the ICN while at NICC. These courses are designed to provide a foundation for planning education. When you graduate from this articulated program, you will transfer at the junior level.

Upon completing your bachelor of science degree in Community and Regional Planning, you will be capable of performing in entry-level positions in public planning agencies or with planning consulting firms. You will be able to integrate planning knowledge and skills in practical applications to current planning issues and communicate in written and oral form.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 91), plus:

		Semester Credits
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:120	Introduction to Macroeconomics OR	3.0
ECN:130	Introduction to Microeconomics	3.0
MAT:156	Statistics	3.0
POL:111	American National Government	3.0
SOC:110	Introduction to Sociology	3.0
	Natural Sciences Electives (transfer-level)	6.0

Iowa State University Courses:*

CRP 253	Survey of Community and Regional Planning
CRP 270	Forces Shaping our Metropolitan Environment

*Iowa State University courses are available on the Iowa Communications Network and may be taken while enrolled in this major at NICC. Credits will apply toward the AA.

CRIMINAL JUSTICE (AA)

The Associate in Arts with a concentration in Criminal Justice provides a course of study which will readily transfer to most four-year colleges and universities. College courses permit completion of the equivalent of the first two years of a bachelor's degree at many four-year colleges. You will be working toward the Criminal Justice concentration and take courses in science, communication, math, humanities, social science, and required criminal justice subject areas.

The general education courses completed for the degree are useful to you whether you continue your formal education at a four-year college or enter the workforce. The Associate in Arts with a concentration in Criminal Justice is a useful beginning if you want to get a start in law enforcement, criminal and juvenile justice systems, corrections, or security.

If you are planning to transfer to a four-year college, you should select courses that satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 91), plus:

		Semester Credits
CRJ:100	Introduction to Criminal Justice	3.0
CRJ:111	Police and Society	3.0
CRJ:120	Introduction to Corrections	3.0
CRJ:131	Criminal Law and Procedure	3.0
CRJ:200	Criminology OR	3.0
CRJ:124	Deviance and Crime	3.0
PHI:105	Introduction to Ethics	3.0
POL:111	American National Government	3.0
PSY:111	Introduction to Psychology	3.0
SOC:110	Introduction to Sociology	3.0
SOC:115	Social Problems OR	3.0
PSY:112	Psychology of Human Relations	3.0
*	Computer Elective	3.0
*	Major Elective	3.0

* Electives:
Computer Electives: BCA:112, BCA:212
Major Electives: CRJ:141, CRJ:201, CRJ:215, CRJ:230

EARLY CHILDHOOD (AA)

The Associate in Arts with a concentration in Early Childhood provides a course of study which will readily transfer to a four-year college or university. The AA in Early Childhood is designed as a continuation of the Early Childhood diploma program. It enables you to enter the field of early childhood education as an assistant or lead teacher in a daycare, preschool, or Head Start program, and with experience, in a position as director.

The general education courses completed for the degree are useful to you whether you continue your formal education or enter the workplace. The Associate in Arts in Early Childhood is a useful beginning if you want to get a professional degree in early childhood or elementary education.

If you are planning to transfer to a four-year college, you should select courses to satisfy specific requirements of the institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer if you have questions about course selection.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Satisfactory physical and mental health is required. Prior to the Early Childhood field experience, you will be required to complete a criminal record/child and adult abuse registry check, a physical exam, and up-to-date immunizations prior to center participation. A positive criminal or abuse check may prevent you from attending center participation/field experience and completion of the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 91), plus:

		Semester Credits
ECE:109	Orientation to Center Participation	4.0
ECE:133	Child Health, Nutrition, and Safety	3.0
ECE:162	Curriculum: Creative Activities	4.0
ECE:167	Curriculum: Science and Math	2.0
ECE:249	Children's Literature	3.0
ECE:277	Early Childhood Field Experience I	2.0
ECE:278	Early Childhood Field Experience II	3.0
ECE:279	Early Childhood Field Experience III	6.0
ECE:946	Seminar	3.0
HSC:133	First Aid/CPR	0.5
PSY:222	Child Psychology	3.0
PSY:285	Education of Exceptional Learners	3.0
SOC:110	Introduction to Sociology	3.0
*	Early Childhood Elective(s)	3.0

* Early Childhood Electives:
ECE:126, ECE:221, ECE:290

Option: Paraeducator Certification

For Advanced Paraeducator Certification, see Education AA, Paraeducator Certification.

EDUCATION (AA)

The Associate in Arts degree in Education allows you to complete the first two years of a teaching degree and prepares you to transfer into an education major at a four-year college. You are encouraged to identify the baccalaureate program which you intend to transfer into and to work with the faculty advisor to select appropriate courses to meet specific admission requirements.

If you plan to transfer to a four-year college, you should select courses to satisfy requirements of the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree, Paraeducator Certification

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 91), plus:

		Semester Credits
Social Science:		
PSY:111	Introduction to Psychology	3.0
PSY:281	Educational Psychology	3.0
SOC:110	Introduction to Sociology	3.0

Science Requirement:
Must complete one natural/life science and one physical science, one of which includes a lab component. Please see the listing in the science course description section of this catalog.

Paraeducator Certification Option

The Paraeducator Certification program is designed to prepare you to support and assist teachers and students in a wide variety of educational and community service settings. You will be given the opportunity to work with children, especially children with disabilities.

The Paraeducator coursework will ensure you have the knowledge and skills needed to support and supplement teacher/provider programs and administrative functions. Upon completion, you will be prepared to apply for Paraeducator Certification from the State Department of Education. Employment opportunities include, but are not limited to, paraprofessional jobs in schools and agencies serving children with disabilities.

ENTRANCE REQUIREMENTS

No requirements for Level I. You must complete a basic skills assessment prior to being accepted into the Level II Option of the Paraeducator Program. Prior to a practicum (Level II), you may be required to complete a criminal record/child and adult abuse registry check.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Level I: All paraeducators wishing to obtain a certificate must go through Level I training.

		Semester Credits
EDU:125/HSV:160	Making a Difference	3.0
EDU:126/HSV:161	Observation and Management of Behavior	3.0

Level II: Areas of Concentration
Completion of Level I plus completion of one three-credit NICC course specific to your area of concentration:

- Early Childhood - PK-3
- Human Services - PK-12
- Special Education - PK-12
- Limited English Proficient - PK-12
- Career and Transition - Grades 5-12

EDU:175/HSV:162	Introduction to Human Disabilities and Services	3.0

Level II: Advanced Paraeducator Certification
Completion of approved AA degree and practicum, or completion of 62 approved college credits and a practicum.

Associate in Arts Degree requirements plus:
Early Childhood AA, Education AA, Human Services AA

ENTREPRENEURIAL STUDIES (AA)

An AA degree in Entrepreneurial Studies is designed to provide you with the knowledge and skills needed to start and grow new ventures, whether the new ventures relate to business, community, or personal endeavors. The Entrepreneurial Studies curriculum will permit you to enter the workforce, begin an entrepreneurial endeavor, or transfer to a four-year institution. You will take courses in entrepreneurship and technical electives in accounting, economics, management, and marketing, as well as courses in computer science, life skills, and general education.

The general education courses completed will be useful whether you continue your formal education at a four-year institution or enter the workplace. If you plan to transfer to a four-year institution, you should consult an academic advisor for transferring course selection and the requirements of that institution. The AA degree in Entrepreneurial Studies can also enhance technical and vocational degrees. The attractiveness of an AA degree in Entrepreneurial Studies is its flexibility and versatility.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 91), plus:

		Semester Credits
BUS:130	Introduction to Entrepreneurship	3.0
BUS:132	Introduction to Managerial Decision Making	3.0
BUS:133	Entrepreneurial Studies	3.0
BUS:137	Innovation and Strategic Business Planning	3.0
BUS:198	Leadership Skills	3.0
ECN:110	*Introduction to Economics	3.0
ENG:108	*Composition II: Technical Writing	3.0
MAT:156	*Statistics	3.0
MKT:298	Seminar in Entrepreneurship	3.0
PSY:112	*Psychology of Human Relations	3.0
SDV:135	Job Seeking Skills	1.0
SDV:200	Introduction to Microcomputers	1.5
**	Social Science Elective	3.0
**	Technical Electives	9.0

* These courses will apply to the AA core requirement. Check the AA core requirement for remaining required coursework.

** Electives:

Technical Electives:
Transfer-level ACC, BCA, BUS, CIS, ECN, FIN, LGL, MGT, MKT, NET:453

Social Science Electives:
Transfer-level ECN, PSY, SOC

HUMAN SERVICES (AA)

The Human Services program will provide employees for the human services agencies in Northeast Iowa and in the surrounding tri-state area. The program is designed to enable you to enter the workforce as a human service worker on a counseling staff, youth care supervisor, or other occupations in the area. The program also prepares you for transfer to a four-year college or university to obtain a baccalaureate degree in an area of interest such as social work, psychology, sociology, special education, or substance abuse.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Prior to the field experience, you will be required to complete a criminal record/child and adult abuse registry check. A positive report may prevent you from attendance in clinical and completion of the program.

AWARD

Associate in Arts Degree

Note: You may also wish to consider the AAS Human Services Generalist program.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements, (page 91) plus:

		Semester Credits
BCA:212	Introduction to Computer Business Applications	3.0
HSV:150	Human Services Technology I	3.0
HSV:151	Human Services Technology II	3.0
HSV:162	Introduction to Human Disabilities and Services OR	3.0
	Major Elective	3.0
HSV:225	Counseling Techniques	3.0
HSV:250	Essentials of Behavioral Modifications	3.0
HSV:255	Addictive Disease Concepts	3.0
PSY:111	*Introduction to Psychology	3.0
PSY:121	*Developmental Psychology OR	3.0
SOC:140	*Human Behavior in the Social Environment	3.0
PSY:226	*Psychology of Aging	3.0
PSY:241	*Abnormal Psychology	3.0
SOC:110	*Introduction to Sociology	3.0

*Will apply toward General Education core requirements

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

LAW ENFORCEMENT (AA)

The Associate in Arts with a concentration in Law Enforcement provides a course of study which will readily transfer to most four-year colleges and universities. College courses permit completion of the equivalent of the first two years of a bachelor's degree at many four-year colleges. You will be working toward the Law Enforcement concentration while taking courses in science, communication, math, humanities, social science, and required law enforcement subject areas.

The curriculum meets requirements if you are already employed by a law enforcement agency and wish to obtain professional advancement or if you desire advanced study.

When you graduate, you 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 U.S. Government's Secret Service, Immigration Service, Border Patrol, and courts hire a significant number of law enforcement personnel.

Upon graduation, you may obtain immediate employment with public or private agencies concerned with public safety, crime prevention, or the apprehension and rehabilitation of criminals. However, if you are considering employment with public agencies, you should 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.

If you plan to transfer to a four-year college, you should select courses to satisfy requirements for the specific institution to which you intend to transfer. Consult your advisor at the four-year institution to which you intend to transfer anytime you have questions about course selection.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements (page 91), plus:

		Semester Credits
CRJ:111	Police and Society	3.0
CRJ:131	Criminal Law and Procedure	3.0
PHI:105	Introduction to Ethics	3.0
POL:111	American National Government	3.0
PSY:111	Introduction to Psychology	3.0
SOC:110	Introduction to Sociology	3.0
SOC:115	Social Problems	3.0
*	Computer Elective	3.0
	Foreign Language (recommended)	4.0
(Twelve credits must be accepted from the Iowa Law Enforcement Academy.)		12.0

* Computer Electives:
BCA:112, BCA:212

LEGAL ASSISTANT/ PARALEGAL (AA)

Legal assistants/paralegals assist attorneys in the delivery of legal services. Through formal education, training, and experience, legal assistants/paralegals have knowledge and expertise regarding the legal system as well as substantive and procedural law, qualifying them to do work of a legal nature under the supervision of an attorney.

The general education courses completed for this degree help you to continue your formal education at a four-year college or enter employment. The Associate in Arts with the Legal Assistant/Paralegal concentration is a useful beginning, allowing you to seek professional employment and help fund your continuing academic pursuits. The final effort in the program is to assist you to prepare for the NALA (National Association of Legal Assistants) certification examination.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Arts Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Arts Degree requirements, (page 91), plus:

		Semester Credits
ADM:116	Keyboarding II	3.0
BUS:185	Business Law I	3.0
BUS:188	Legal Environment of Business	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ENG:106	Composition II	3.0
LGL:110	Introduction to Paralegal Studies	4.0
LGL:150	Legal Assistant - Legal Writing/Research	3.0
PHI:105	Introduction to Ethics	3.0

Legal Concentration Electives (9 credits)

Three of the following:

ADM:199	Legal Studies: Terminology and Transcription	3.0
LGL:130	Legal Assistant - Probate/Real Estate	3.0
LGL:170	Legal Assistant - Litigation	3.0
LGL:190	Legal Assistant - Taxation	3.0
LGL:230	Criminal Law and Procedure	3.0
LGL:250	Family Law	3.0
LGL:270	Evidence	3.0
SDV:224	Coop Career Experience	3.0

MANAGEMENT INFORMATION SYSTEMS (AA)

The AA degree in Management Information Systems will prepare you to enter the workforce or transfer to a computer-related major at a four-year college or university.

If you plan to transfer to a four-year college, select courses to satisfy the requirements of the specific institution to which you intend to transfer, and consult with your advisor there with questions about course selection.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Arts Degree

LENGTH

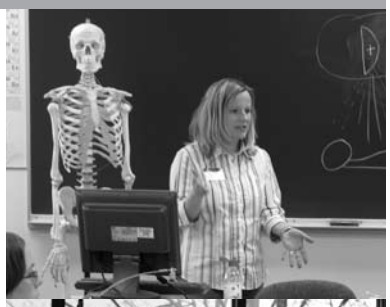
The length of the program will depend upon your educational preparation and the course load you carry.

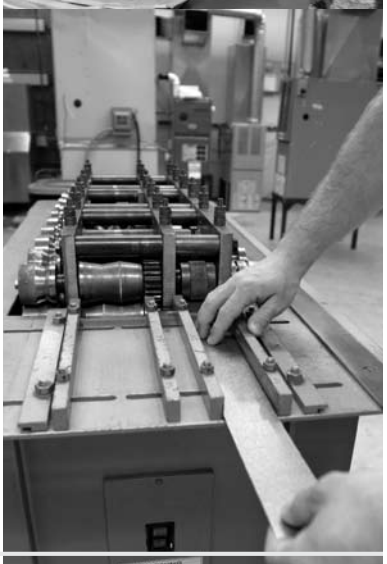
Curriculum

Associate in Arts Degree requirements (page 91), plus 20 credits of technical electives. Sample electives may include:

		Semester Credits
ACC:115	Introduction to Accounting I	4.0
ACC:116	Introduction to Accounting II	4.0
BCA:112	Introduction to Data Processing	3.0
BCA:212	Introduction to Computer Business Applications	3.0
BCA:213	Intermediate Computer Business Applications	3.0
BUS:103	Introduction to Business	4.0
CIS:160	Introduction to Visual Languages	3.0
CIS:303	Introduction to Database	3.0
CIS:400	Introduction to Procedural Languages	3.0
CIS:420	Advanced Procedural Languages	3.0
CIS:505	Structured Systems Analysis	4.0
CIS:614	Advanced Visual Languages	3.0
GRA:143	Photoshop I	2.0
GRA:151	Web Design	3.0
GRA:158	Web Multimedia	3.0
GRA:179	Publication Software	3.0
MGT:102	Principles of Management	4.0
MKT:110	Principles of Marketing	3.0
NET:134	Operating Systems	4.0
NET:248	Cisco Networking	3.0

Technical **Programs**





- Accounting Clerk
- Accounting Specialist
- Administrative Assistant
- Associate Degree Nursing
- Automotive Mechanics
- Business Specialist
- CAD Specialist Certificate
- Carpentry
- Carpentry Certificates: (Cabinet Making; Finishing Skills; Floor and Framing Skills; Foundation Skills)
- Coding Specialist (see Health Information Technology)
- Computer Analyst: (Business and Web Programming; Networking Administration and Tech Support)
- Construction Technology
- Dental Assisting
- Desktop Publishing Specialist
- Diesel Mechanics
- Early Childhood
- Electroneurodiagnostic Technology
- Electronic Technology
- Emergency Medical Technician-Paramedic
- Emergency Medical Technician-Basic Certificate
- Enology Specialist
- Enology Specialist Diploma Option
- Enology Certificate
- Entrepreneurial Cosmetology
- Entrepreneurial Studies Certificate
- Firefighting Specialist
- Gas Utility Construction and Service
- Graphic Design
- Health Information Technology (Coding Specialist)
- Heating and Air Conditioning
- Human Services Generalist
- Human Services Technician
- Marketing
- Marketing Management
- Medical Laboratory Technician
- Medical Transcriptionist
- Office Technology: (Legal; Medical; Secretarial)
- Paraeducator Certification (see Education AA)
- Practical Nursing
- Radiologic Technology
- Respiratory Care
- Surgical Technology
- Tourism Certificate
- Viticulture Technology
- Viticulture Certificate
- Viticulture Technology Diploma Option
- Welding

student driven...community focused

2008-2009

ACCOUNTING CLERK

Every successful business must have systematic and up-to-date records of its financial affairs. Maintaining those records is the job of the bookkeeper/accountant who records day-to-day business transactions in journals and ledgers. Employers may also periodically balance accounts and prepare statements for administrative officers showing such things as accounts receivable, accounts payable, and profit and loss. They may also prepare state and federal tax returns. This program is designed to prepare you to secure employment as an accounting clerk, bookkeeper, cost accounting clerk, or payroll clerk. Simulated practical experience is incorporated into courses during the entire program.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ACC:115	Introduction to Accounting	4.0
ADM:106	Introduction to Keyboarding OR	2.0
ADM:116	Keyboarding II	3.0
BUS:103	Introduction to Business	4.0
MAT:041	Basic Math or higher-level MAT	3.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
SDV:200	Introduction to Microcomputers OR	1.5
BCA:212	Introduction to Computer Business Applications	3.0

Term Two		
ACC:116	Introduction to Accounting II	4.0
ACC:804	Accounting Spreadsheet Applications	3.0
SDV:135	Job Seeking Skills	1.0
*	Communication Elective	3.0
*	Technical Electives	7.0

*Electives:

Communication Electives:
COM:020, COM:145, COM:155, ENG:021, ENG:105, ENG:106, ENG:221, SPC:112

Technical Electives:
ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET (excluding NET:116, NET:146, NET:150), TRV

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

ACCOUNTING SPECIALIST

This program is designed to prepare you for employment opportunities in the accounting field. Upon completion of the program, you should be prepared to enter business in the areas of cost accounting, general accounting, and many other specialized areas of financial reporting. Requirements include accounting principles and practice in addition to general and occupational information.

Employment opportunities are currently found in small businesses, governmental agencies, manufacturing industries, legal and accounting firms, insurance offices, and agribusiness firms.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ACC:152	Financial Accounting	4.0
ADM:106	Introduction to Keyboarding OR	2.0
ADM:116	Keyboarding II	3.0
BUS:103	Introduction to Business	4.0
MAT:063	Elementary Algebra or higher-level MAT	4.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
Term Two		
ACC:156	Managerial Accounting	4.0
ACC:804	Accounting Spreadsheet Applications	3.0
BCA:212	Introduction to Computer Business Applications	3.0
*	Communication Elective	3.0
*	Math/Science Elective	3.0
Term Three		
ACC:231	Intermediate Accounting I	4.0
BUS:211	Business Statistics OR	4.0
MAT:156	Statistics	3.0
MGT:102	Principles of Management	4.0
*	Communication Elective	3.0
*	Technical Elective	4.0
Term Four		
ACC:222	Cost Accounting	4.0
ACC:232	Intermediate Accounting II	4.0
ACC:480	Advanced Accounting Applications OR	3.0
SDV:224	Coop Career Experience III	3.0
ECN:120	Principles of Macroeconomics	3.0
SDV:135	Job Seeking Skills	1.0
*	Technical Elective	3.0

* Electives:

General Education Electives:

Communication Electives: transfer-level COM, ENG, SPC

Math Electives: MAT:102, MAT:744, transfer-level MAT

Science Electives: transfer-level BIO, CHM, ENV, PHS, PHY

Technical Electives: ACC:162, ACC:252, ACC:265, ACC:272, ACC: 285, ACC:311, ADM:116, ADM:119, ADM:132, ADM:141, ADM:162, ADM:175, BCA:107, BCA:112, BCA: 213, BUS:112, BUS:121, BUS:130, BUS:132, BUS:133, BUS:137, BUS:180, BUS:185, BUS:186, BUS:188, BUS:198, BUS: 214, BUS:261, BUS: 262, CSC:117, CIS:120, ECN:130, FIN:101, FIN:110, FIN:122, MGT:110, MGT:170, MGT:180, MGT:186, MGT:215, MKT:110, MKT:120, MKT:140, MKT:142, MKT:150, MKT:162, MKT:190, MKT:298, MKT:943, NET:134 , TRV:113, TRV:114

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

ADMINISTRATIVE ASSISTANT

The administrative assistant will have a well-rounded background in all areas of office management. The program includes upper-level courses in management, law, computers, and accounting as well as coursework in human relations and business communication.

As an administrative assistant, you will play a major role in the success of every business; your position is key to supporting any management function.

After graduation you may transfer up to two years of credits to several colleges.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ADM:116	Keyboarding II	3.0
ADM:162	Office Procedures	3.0
BUS:185	Business Law I	3.0
ENG:013	Basic Writing	3.0
PSY:112	Psychology of Human Relations	3.0

Term Two		
ADM:119	Keyboarding III	3.0
BUS:103	Introduction to Business	4.0
*	Communication Elective	3.0
*	General Education Elective	3.0
*	Math Elective	3.0

Term Three		
ACC:115	Introduction to Accounting OR	4.0
ACC:152	Financial Accounting	4.0
ADM:148	Transcription	2.0
ADM:175	Records and Database Management	2.0
*	Technical Electives	6.0

Term Four		
ACC:116	Introduction to Accounting II OR	4.0
ACC:156	Managerial Accounting	4.0
ACC:162	Payroll Accounting	4.0
BCA:212	Introduction to Computer Business Applications	3.0
BUS:121	Business Communications	3.0
*	Technical Elective	3.0

Term Five		
ADM:936	Occupational Experience	4.0
BCA:213	Intermediate Computer Business Applications	3.0
MGT:102	Principles of Management	4.0
SDV:135	Job Seeking Skills	1.0
*	General Education Elective	3.0

*Electives:

Communication Electives: COM:155, ENG:105, ENG:106, SPC:112

Math Electives: MAT:102, MAT:744, transfer-level MAT

General Education Electives (transfer-level): ART, ASL, BCA:112, BIO, CHM, CLS, COM:145, COM:155, DRA, ECN, ENG:105, ENG:106, ENG:221, ENV, FLS, HIS, HUM, LIT, MAT, MUS, PHI, PHS, PHY, POL, PSY, REL, SOC, SPC

Technical Electives: ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, HIT, LGL, MGT, MKT, MTR:145, NET (excluding NET:116, NET:146, NET:150), TRV

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Associate Degree Nursing

The Associate Degree Nursing program prepares you to assess, plan, implement, and evaluate the health care needs of patients and clients. This comprehensive program includes specific nursing courses as well as core course requirements in the areas of communication, science, math, social science, and life skills. Classroom activities are closely correlated with selected learning experiences in hospitals and other health care settings. After successful completion of this program, you are eligible to write the National Licensure Exam (NCLEX) to become a Registered Nurse. The program is approved by the Iowa Board of Nursing.

This program participates in a state-wide articulation program which facilitates transfer of ADN graduates to four-year institutions within Iowa for the advanced study of nursing.

Nursing courses with a clinical component may not be taken by a person who has been denied nursing licensure by a board of nursing; whose nursing license is currently suspended, surrendered, or revoked in any U.S. jurisdiction; whose nursing license/registration is currently suspended, surrendered, or revoked in another country due to disciplinary action.

CLASS HOURS

Classes are scheduled two or three days per week on campus. Clinical experiences are scheduled the remaining days in hospitals, nursing homes, and other health care settings and can occur on either the day or evening shift. Carpools are considered when making assignments to clinical activities.

ENTRANCE REQUIREMENTS

The ADN program is a ladder-concept program. Prior to acceptance into the Nursing program, students must have successfully completed Human Anatomy and Physiology I and Lab. Once completed, students will be accepted into the Nursing program. Students who graduate from NICC's Practical Nursing program are eligible to complete the sophomore year for completion of an AAS in Nursing. Advanced-standing students who are current LPN's can articulate into the sophomore year only after transcript review, space availability, and Dean of Health approval. A Licensed Practical Nurse seeking admission will need to provide proof of current licensure and complete ADN:146, BIO:165, BIO:167, BIO:170, BIO:172, and a life-span growth and development course prior to starting the sophomore year. The advanced-standing students will begin coursework with ADN:148. All nursing students are required to attend a program orientation prior to entrance into the program. Notification of dates and times will occur after acceptance to the Nursing program. In addition, the following requirements must be satisfied prior to or during term one of NICC's Nursing program.

Nursing Concepts is in term two of the Nursing program and is the first clinical course. If any of the following are not completed prior to starting Nursing Concepts, your opening in the program will be forfeited and offered to another student. The student who does not successfully satisfy the program requirements listed below will be placed at the bottom of the waiting list after submission of the required paperwork.

- Completion with a grade of C- or better of the following general education courses:
  - Human Anatomy and Physiology II with lab
  - Dosage Calculations
- Submission of current physical and immunization records.
- *Completion of an American Heart Association HealthCare Provider CPR or American Red Cross CPR for the Professional Rescuer certification. A copy of your current CPR certification must be submitted.
- Clearance on a criminal, dependent adult and child abuse background screening. You will receive information regarding the screenings after acceptance into the Nursing program. Note: A positive report may prevent you from attendance in clinical and completion of the program.
- *Successful completion of a 75-hour Certified Nurse Aide (CNA) course from a community college or an approved CNA course provider. A copy of your certificate must be submitted. Please contact NICC Continuing Education, 563-562-3263 ext. 399, to arrange a course.
- *Completion of the written and skill competency tests for the CNA registry. A copy of your CNA registry results must be submitted.

(Continued...)

Items indicated with an * may be submitted immediately. Verification materials should be submitted to:

Northeast Iowa Community College
Health Department Secretary
10250 Sundown Road
Peosta, IA 52068

In addition to the above requirements, you may also be required to provide documentation of health insurance coverage and undergo drug screening. Please be aware of the following physical demands during your clinical education courses. Daily activities require bending, stooping, squatting, reaching, pushing, and pulling in all directions. You will be asked to lift and carry objects weighing up to a minimum of 50 pounds and also shared weight. Clinical tasks require use of hands for repetitive action such as simple and firm grasping and fine manipulation and walking, including stair stepping. You may also be in contact with communicable diseases and chemical/biohazardous materials and odors. For clinical assessments, visual and hearing acuity is essential. Travel to clinical sites in outlying areas will be required at times throughout the program. Students are responsible for any travel costs. You will need to show proof of high school graduation or equivalent prior to taking the NCLEX licensure exam. The Iowa Board of Nursing will no longer review criminal history prior to application for licensure.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

(For summer entry)

Term One		Credits
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
ENG:105	Composition I	3.0
PNN:200	Dosage Calculations	1.0

Term Two		
PNN:174	Nursing Concepts	7.0
PNN:204	Pharmacology Medications	1.0
PNN:270	Introduction to Nutrition	2.0
PNN:527	Nursing Care of Adults I	3.5
PSY:121	Developmental Psychology	3.0

Term Three		
PNN:529	Dimensions of Practical Nursing	4.25
PNN:410	Nursing Care of Children	2.0
PNN:432	Nursing Care of the Childbearing Family	2.25
PNN:528	Nursing Care of Adults II	6.0

Term Four		
ADN:148	Transition to Associate Degree Nursing	4.0
BIO:183	Microbiology	3.0
BIO:184	Microbiology Lab	1.0
PSY:111	Introduction to Psychology	3.0

Term Five		
ADN:444	Comprehensive Nursing Care of Children AND	4.0
ADN:475	Comprehensive Nursing Care of the Mental Health Client AND	6.0
ADN:434	Comprehensive Nursing Care of the Childbearing Family	4.0
ENG:106	Composition II OR	3.0
SPC:112	Public Speaking	3.0

Term Six		
ADN:526	Comprehensive Nursing Care of Adults	12.0
SOC:110	Introduction to Sociology	3.0

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

NOTE: The following year rules exist for nursing program coursework. If exceeded, the course(s) will need to be repeated. Nursing courses and Anatomy and Physiology courses cannot be greater than five years old. Introduction to Psychology cannot be greater than ten years old prior to taking Comprehensive Nursing Care of the Mental Health Client.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

RN TO BSN Coursework

The Iowa state-wide articulation plan for nursing education allows Iowa community college credit from an A.D.N. degree to be accepted in transfer for half (a total of 64 hours) of a Bachelors of Science in Nursing degree (B.S.N.) at an Iowa college or university program. Clarke College in Dubuque, Luther College in Decorah, and the University of Iowa in Iowa City have such programs as well as other schools in the state. There are also distance learning options around the country. Most require that you have attained your RN license. For further information, contact your NICC advisor.

AUTOMOTIVE MECHANICS

In this age of rapidly changing technology, the automotive repair field demands personnel who are trained in the latest methods of diagnosis and repair. If you are mechanically inclined and willing to learn the necessary skills, you will find many opportunities in the automotive field. Instruction is provided in the basic skills as well as on modern, up-to-date diagnostic equipment.

After completing the necessary coursework, you should be prepared to take exams to receive certification by the National Institute for Automotive Service Excellence (ASE) in the following areas: automatic transmission/ transaxle, brakes, electrical systems, engine performance, engine repair, heating and air conditioning, manual drive train and axles, suspension, and steering.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and complete a basic skills assessment prior to being accepted into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
AUT:110	Auto Shop Practices	.5
AUT:164	Automotive Engine Repair**	4.0
AUT:503	Automotive Brake Systems**	3.0
ELE:200	Auto Electrical Systems**	7.0
HSC:133	First Aid/CPR	.5
*	Math Elective	3.0-4.0
Term Two		
AUT:204	Automotive Automatic Transmissions/ Transaxles Service**	4.0
AUT:248	Automotive Drive Trains**	4.5
AUT:404	Automotive Suspension and Steering**	4.0
WEL:330	Welding Fundamentals	1.0
*	Communication Elective	3.0
*	Computer Elective	1.0-3.0
Term Three		
AUT:704	Automotive Heating and Air Conditioning**	4.0
AUT:809	Automotive Engine Performance**	8.0

*Electives:

Math Electives: MAT:041, MAT:053, MAT:063, MAT:102, MAT:744, transfer-level MAT

Communication Electives: COM:020, COM:723, ENG:013, ENG:021, ENG:105

Computer Electives: BCA:100, BCA:112, BCA:212, SDV:200

**Completion of these courses prepares students to take an exam to receive ASE Certification.

The computer literacy requirement is built into the program coursework.

BUSINESS SPECIALIST

The Business Specialist program provides you with knowledge and skills in preparation for business positions of a general nature. Areas of emphasis include accounting, marketing, management, human resources management, and business law. You are prepared to seek employment in entry-level management and supervisory positions.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:112	Introduction to Data Processing	3.0
BUS:103	Introduction to Business	4.0
MAT:041	Basic Math or higher-level MAT	3.0
*	Psychology Elective	3.0
*	Computer Elective	1.5-3.0

Term Two		
ENG:105	Composition I	3.0
MKT:110	Principles of Marketing	3.0
SPC:112	Public Speaking	3.0
*	Math/Science Elective	3.0
*	Technical Electives	6.0

Term Three		
ACC:152	Financial Accounting	4.0
BUS:180	Business Ethics	3.0
BUS:185	Business Law I	3.0
ECN:120	Principles of Macroeconomics	3.0
MGT:102	Principles of Management	4.0
SDV:135	Job Seeking Skills	1.0

Term Four		
ACC:156	Managerial Accounting	4.0
ECN:130	Principles of Microeconomics	3.0
MGT:170	Human Resource Management	3.0
MGT:215	Principles of Financial Management	3.0
*	Technical Elective	3.0

* Electives:
  Computer Electives: BCA:112, BCA:212, SDV:200
  Math/Science Electives:
    Math: MAT:102, MAT:744, transfer-level MAT
    Science: transfer-level BIO, CHM, ENV, PHS, PHY
  Psychology Electives: transfer-level PSY
  Technical Electives: ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET (excluding NET:116, NET:146, NET:150), TRV

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

CAD SPECIALIST

The CAD Specialist certificate offers you an opportunity to acquire proficiency in computer-aided design. It can serve as an introduction to general CAD skills, as a springboard to further study, as a short program for the development of specific skills to obtain immediate employment, or as a bridge to upgrade your existing skills with the latest in CAD technology.

This certificate presents you with hands-on activities in two- and three-dimensional computer generation, presentation quality drawings, blueprint fundamentals, solid modeling, and computer animation and simulation techniques. You will work with computer programs that will allow you to construct commercial-grade graphics, animation, and special effects.

CAD specialists are in demand by the construction industry, factories, industrial manufacturers, architectural and engineering firms, special-effects production companies, and software firms.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and must complete a basic skills assessment prior to acceptance into the program.

AWARD

Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

		Credits
CAD:104	Computer Aided Drafting OR	3.0
CAD:172	Introduction to CAD: AutoCAD	2.0
CAD:165	Rendering and Animation	3.0
CAD:175	Advanced CAD: AutoCAD	2.0
CON:113	Construction Print Reading OR	2.0
WEL:110	Welding Blueprint Reading	2.0
SDV:200	Introduction to Microcomputers or equivalent	1.5

CARPENTRY

The Carpentry program offers education and practical experience in basic residential carpentry. You will receive competency-based instruction in the use of up-to-date carpentry production equipment such as saws, jointers, sanders, and routers. Practical experience is provided through construction of a residence each year by the carpentry students. As the carpentry trade is one of the most basic trades in our society, employment opportunities for carpenters may be found in communities of varying sizes.

The NICC Carpentry program is recognized by the Associated General Contractors of America through the National Center for Construction Education and Research

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program, and complete a basic skills assessment prior to acceptance into the program.

The program sequence begins in the summer term. Admission of new students for fall or spring semesters is by permission of department dean only.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
CON:111	Basic Drafting	2.0
CON:113	Construction Print Reading	2.0
CON:141	Basic Construction Skills	2.0
CON:166	Construction Lab I: Foundations	4.0
CON:375	Construction I	3.0
Term Two		
CON:376	Construction II	4.0
CON:378	Construction Lab II	10.0
MAT:130	Trigonometry OR	3.0
MAT:779	Applied Trigonometry	3.0
SDV:135	Job Seeking Skills	1.0
Term Three		
CON:379	Construction III	4.0
CON:381	Construction Lab III	10.0
*	Communication Elective	3.0

*Communication Electives:
COM:723, ENG:105, SPC:112

Prior to completion of Term 1, students will acquire a completion certificate for First Aid/CPR.

NOTE: During Term 1, while enrolled in CON:166, students will complete a ten-hour OSHA training course online through Career Safe Online.

Demonstrated computer literacy is a requirement for graduation. For this program that requirement may be met by completion of a college computer literacy course acceptable to the department.

CARPENTRY CERTIFICATES

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and must complete a basic skills assessment prior to being accepted into the program.

AWARD

Certificate

LENGTH

The length of the certificate will depend upon your educational preparation and the course load you carry.

Cabinet Making Certificate

This certificate emphasizes techniques involved in the building of residential and light commercial cabinets in terms of joinery for cabinet work. You complete hands-on competency-based training using different types of joinery in constructing cabinets with doors and drawers included in cabinet structures.

		Credits
CON:384	Cabinet Making	5.0

Finishing Skills Certificate

This certificate emphasizes techniques involved in the building of residential and light commercial structures in terms of finish work. You complete hands-on competency-based training at a student building project in interior finish work and cabinet making.

		Credits
CON:379	Construction III	4.0
CON:381	Construction Lab III	10.0

Floor and Framing Skills Certificate

This certificate offers hands-on training in floor systems and framing for the construction of residential and small commercial-type structures. You learn floor framing, wall framing, roof framing, roofing, siding, and exterior millwork on a student building project.

		Credits
CON:376	Construction II	4.0
CON:378	Construction Lab II	10.0

Foundation Skills Certificate

This certificate is designed to provide competency-based instruction concerning the use of tools, materials, and practices used in the building trades. You apply this knowledge to concrete form construction, footing and foundation, framing, laying out joists, subflooring, wall studs, windows, doors, rafters, and related cuts for a student building project.

		Credits
CON:111	Basic Drafting	2.0
CON:113	Construction Print Reading	2.0
CON:166	Construction Lab I: Foundations	4.0
CON:375	Construction I	3.0

COMPUTER ANALYST

The Computer Analyst program offers two options: Business and Web Programming and Networking Administration and Tech Support. The common core provides you with the flexibility of changing options at the conclusion of your third semester. Combining robust technical skills with strong communication skills is important to successfully prepare you for employment in today's computer industry. The program is designed to prepare you for a position as an application programmer, maintenance programmer, web designer or web developer, technical support person, microcomputer consultant, trainer, networking administrator, or network support person.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Students will need to complete one of the following options:

Business and Web Programming Option

Term One		Credits
BCA:112	Introduction to Data Processing	3.0
BCA:212	Introduction to Computer Business Applications	3.0
CIS:115	Introduction to AS/400	1.0
CIS:120	Introduction to Programming Logic	2.0
ENG:105	Composition I	3.0
GRA:151	Web Design	3.0
Term Two		
CIS:160	Introduction to Visual Languages	3.0
CIS:731	Communication for the Computer Analyst	2.0
NET:115	Troubleshooting	2.0
NET:248	Cisco Discrovery: Networking for Home and Small Business	3.0
SPC:112	Public Speaking	3.0
Term Three		
*	Math/Science Elective	3.0
*	Psychology/Sociology Elective	3.0
*	Technical Elective	2.0
Term Four		
CIS:303	Introduction to Database	3.0
CIS:505	Structured Systems Analysis	4.0
CIS:724	Help Desk Customer Support	2.0
*	Major Elective	4.0
*	Networking Elective	3.0
Term Five		
CIS:800	Computer Project Seminar	3.0
NET:134	Operating Systems	4.0
*	Major Electives	8.0
*	Technical Elective	3.0

*** Electives:**

Major Electives: BCA:183, CIS:170, CIS:273, CIS:400, CIS:420, CIS:614, CIS:801, GRA:143, GRA:148, GRA:158

Math/Science Electives: MAT:102, MAT:744; transfer-level BIO, CHM, ENV, MAT, PHS, PHY

Networking Electives: NET:318, NET:505

Sociology/Psychology Electives: PSY:111, PSY:112, PSY:251, SOC:110, SOC:208

Technical Electives: ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET (excluding NET:116, NET:146, NET:150), TRV

Demonstrated computer literacy is a requirement for graduation. For these programs the computer literacy requirement is built into the program coursework.

(Continued...)

Networking Administration and Tech Support Option

Term One		Credits
BCA:112	Introduction to Data Processing	3.0
BCA:212	Introduction to Computer Business Applications	3.0
CIS:115	Introduction to AS/400	1.0
CIS:120	Introduction to Programming Logic	2.0
ENG:105	Composition I	3.0
GRA:151	Web Design	3.0

Term Two		
CIS:160	Introduction to Visual Languages	3.0
CIS:731	Communication for the Computer Analyst	2.0
NET:115	Troubleshooting	2.0
NET:248	Cisco Discrovery: Networking for Home and Small Business	3.0
SPC:112	Public Speaking	3.0

Term Three		
*	Math/Science Elective	3.0
*	Psychology/Sociology Elective	3.0
*	Technical Elective	2.0

Term Four		
CIS:303	Introduction to Database	3.0
CIS:505	Structured Systems Analysis	4.0
CIS:724	Help Desk Customer Support	2.0
*	Major Elective	4.0
*	Network Elective	3.0

Term Five		
CIS:723	Help Desk Concepts	3.0
NET:134	Operating Systems	4.0
NET:946	Seminar	3.0
*	Major Electives	8.0

* Electives:

Math/Science Electives: MAT:102, MAT:744; transfer-level BIO, CHM, ENV, MAT, PHS, PHY

Major Electives: BCA:183, CIS:730, CIS:801, NET:249, NET:250, NET:251, NET:318, NET:505

Networking Electives: NET:318, NET:505

Sociology/Psychology Electives: PSY:111, PSY:112, PSY:251, SOC:110, SOC:208

Technical Electives: ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET (excluding NET:116, NET:146, NET:150), TRV

Demonstrated computer literacy is a requirement for graduation. For these programs the computer literacy requirement is built into the program coursework.

CONSTRUCTION TECHNOLOGY

The Construction Technology program prepares you for commercial carpentry, entry-level management, or trainee supervisory positions in the construction and materials supply industry. Courses in hands-on construction experience, communications, business, and mathematics develop the job-site skills necessary to exercise supervision of a construction site after some practical experience.

This program is designed to train you for employment in the construction technology field as well as increase skills and opportunities if you are already employed in a construction field. Construction managers may be employed by a construction firm or as part of a construction team in supervisory and management positions in lumber retail outlets, small stores where lumber products are sold or distributed, and sales and management in wholesale supply organizations. The construction manager advises and assists the construction team, reviews construction plans and specifications, makes recommendations regarding the feasibility, economy, materials, labor, projected costs, and time requirements for project activities, and supervises all aspects of the construction process. Wages will vary with location of job and experience.

NICC's Construction Technology program is recognized by the Association of General Contractors of America through the National Center for Construction Education and Research.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
CON:111	Basic Drafting	2.0
CON:113	Construction Print Reading	2.0
CON:141	Basic Construction Skills	2.0
CON:166	Construction Lab I: Foundations	4.0
CON:375	Construction I	3.0
Term Two		
CON:376	Construction II	4.0
CON:378	Construction Lab II	10.0
MAT:130	Trigonometry OR	3.0
MAT:779	Applied Trigonometry	3.0
Term Three		
CON:379	Construction III	4.0
CON:381	Construction Lab III	10.0
ENG:105	Composition I OR	3.0
SPC:112	Public Speaking OR	3.0
COM:723	Workplace Communications	3.0
Term Four		
CAD:172	Introduction to CAD	2.0
CON:382	Construction IV	5.0
CON:383	Building Codes and Specifications	3.0
MGT:102	Principles of Management	4.0
PSY:112	Psychology of Human Relations	3.0
Term Five		
CAD:175	Advanced CAD	2.0
CON:384	Cabinet Making	5.0
CON:385	Construction Estimating	3.0
PHY:162	College Physics I OR	4.0
PHY:710	Technical Physics	3.0
SOC:xxx	Sociology Elective	3.0

It is suggested that all AAS students work in commercial construction during the summer between their term three and term four semesters.

Prior to completion of term 1, students will acquire a completion certificate for First Aid/CPR.

During Term 1, while enrolled in CON:166, students will complete a 10-hour OSHA training course online through Career Safe Online.

Demonstrated computer literacy is a requirement for graduation and may be met by the completion of a college computer literacy course acceptable to the department.

DENTAL ASSISTING

The Dental Assisting curriculum is career-oriented. It prepares the student, as a member of the dental health team, to assist the dentist in all phases of dentistry. The program includes chairside procedures associated with general and specialty dentistry, radiology, laboratory, and business office assistance. Clinical experience is an integral part of the educational program with rotations through various dental facilities.

The program is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of approval with reporting requirements. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at 312-440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

Upon successfully completing the program, you are eligible to take an examination prepared by the Dental Assisting National Board to become a Certified Dental Assistant (CDA). Successful completion of the Radiation Health and Safety and Infection Control sections of this national exam also fulfills the radiography and infection control testing requirement of the Iowa Board of Dental Examiners.

After graduation you have the flexibility of being employable nationwide. Dental assisting offers some of the most ideal working conditions and attractive hours of any of the health professions while demanding a high degree of interaction between staff and patient.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment in reading and meet the minimum entrance requirements prior to being accepted into the program. A skill developing activity is available at no cost if you do not meet the minimum requirements on the first testing. Current adult and child CPR certification and current physical, dental, and immunization records are required before attending the clinical portion of dental assisting courses. A high school diploma or its equivalent is required for admission to the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
COM:020	Communication Skills*	3.0
DEA:203	Applied Anatomy and Physiology	1.5
DEA:250	Dental Science	4.5
DEA:311	Dental Radiography I	2.0
DEA:411	Dental Materials I	2.0
DEA:510	Principles of Dental Assisting	6.5
SDV:060	Time and Stress Management	1.0
Term Two		
DEA:264	Dental Science II	3.0
DEA:322	Dental Radiography II	3.0
DEA:418	Dental Materials II	3.0
DEA:560	Dental Clinic I	3.0
DEA:605	Dental Specialties	4.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
SDV:135	Job Seeking Skills	1.0
Term Three		
DEA:561	Dental Clinic II	4.5
DEA:703	Dental Office Procedures	3.0

*Will also accept ENG:021, ENG:105, SPC:112

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

DESKTOP PUBLISHING SPECIALIST

Desktop publishing technology is one of the fastest growing areas of computer use. The Desktop Publishing Specialist program combines classroom instruction and practical experience to teach skills needed for employment in the field of desktop publishing.

You will apply technical knowledge to plan and execute publication tasks using desktop publishing equipment and software. The program includes design and implementation of page formats, layouts, and text composition. It also provides instruction in making typographical selections using computer graphics and other computer-assisted design programs. This program also focuses on using the Internet as a medium for displaying desktop publishing documents.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ADM:116	Keyboarding II	3.0
BCA:112	Introduction to Data Processing	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ENG:013	Basic Writing	3.0
GRA:151	Web Design	3.0
*	Math Elective	3.0
Term Two		
BCA:213	Intermediate Computer Business Applications	3.0
ENG:021	Foundations of Writing OR	3.0
ENG:105	Composition I	3.0
GRA:143	Photoshop I	2.0
GRA:179	Publication Software	3.0
PSY:112	Psychology of Human Relations	3.0
Term Three		
ADM:936	Occupational Experience	4.0
BCA:183	Basic Web Design Software	2.0
GRA:120	Illustrator	2.0
GRA:148	Photoshop II	2.0
SDV:135	Job Seeking Skills	1.0
*	Technical Elective	3.0

*Electives:
Math Elective: Any non-developmental MAT
Technical Electives: ADM (excluding ADM:106, ADM:199, ADM:209), BCA, CIS, CSC, GRA, NET

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

DIESEL MECHANICS

The increased mobility of people and industries has caused a large growth in the diesel industry. Where there are diesel engines, there is a need for mechanics to keep them running. As a diesel mechanic, you will be prepared as an all-around mechanic capable of performing work on all systems of the vehicle. You must exhibit an attitude compatible with work requirements, demonstrate the ability to work with co-workers, and possess competencies in electrical systems, fuel systems, drive trains, and engines. Competency-based training will be offered on front-to-rear maintenance of diesel equipment.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and complete a basic skills assessment prior to acceptance into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
AUT:820	Automotive Tuneup	2.0
AUT:829	Gas Engine Principles	4.0
AUT:830	Gas Support Systems	4.0
DSL:353	Diesel Engine Principles	4.0
HSC:133	First Aid/CPR	.5
WEL:330	Welding Fundamentals	1.0
*	Computer Elective	1.0-3.0
Term Two		
AUT:321	Automotive Transmissions	2.0
DSL:449	Diesel Support Systems	3.0
DSL:533	Drive Trains	3.0
DSL:632	Brakes - Diesel	2.0
ELT:145	Electrical Systems - Diesel	4.0
*	Math Elective	3.0-4.0
Term Three		
DSL:733	Air Conditioning	3.0
DSL:803	Equipment Repair - General	6.0
*	Communication Elective	3.0

*Electives:

Communication Electives: COM:020, COM:723, ENG:013, ENG:021, ENG:105

Computer Electives: BCA:100, BCA:112, BCA:212, SDV:200

Math Electives: MAT:041, MAT:053, MAT:063, MAT:102, MAT:744, transfer-level MAT

In this program, the computer literacy requirement is built into the program coursework.

EARLY CHILDHOOD

Child care centers, preschools, kindergartens, and child development centers offer many possibilities for employment now that there is increasing recognition of the importance of early childhood training. Upon graduation from the Early Childhood program, you can work as an assistant, teacher, or director of a child care center or preschool. You receive preparation in planning, guidance and supervision of children, and in programming activities for outdoor play, dramatic play, art, music, literature and language, science and math, health activities, and field trips. You will also develop a basic understanding of the principles of child development, safety procedures, assessment and evaluation, communication skills, and nutritional needs of children. Upon graduation you will have employment opportunities nationwide.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Satisfactory physical and mental health is required. Prior to any of the Early Childhood Field Experiences, you will be required to complete a criminal record/child and adult abuse registry check and a physical exam with up-to-date immunizations. A positive criminal or abuse check may prevent you from attending center participation/field experience and completion of the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ECE:109	Orientation to Center Participation	3.0-4.0
ECE:162	Curriculum: Creative Activities	4.0
ECE:249	Children's Literature OR	3.0
EDU:235	Children's Literature	3.0
HSC:133	First Aid/CPR	.5
PSY:222	Child Psychology	3.0
*	Communication Elective	3.0

Term Two		
ECE:133	Child Health, Nutrition, and Safety	3.0
ECE:167	Curriculum: Science and Math	2.0
ECE:277	Early Childhood Field Experience I	2.0
ECE:278	Early Childhood Field Experience II	3.0
PSY:285	Education of Exceptional Learners	3.0
SOC:110	Introduction to Sociology OR	3.0
SOC:121	Sociology of Families	3.0
*	Early Childhood Elective	3.0

Term Three		
ECE:279	Early Childhood Field Experience III	6.0
ECE:946	Seminar	3.0

*Electives:

Communication Electives: COM:020, ENG:021, ENG:105, ENG:106, SPC:112

Early Childhood Electives: ECE:126, ECE:221, ECE:290

ECE:290 may satisfy the required management component for Head Start instructors and day care of preschool directors

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement will be met by computer workshop activities during the Orientation to Center Participation class.

ELECTRONEURODIAGNOSTIC TECHNOLOGY

The Electroneurodiagnostic (END) Technology program between NICC and Eastern Iowa Community College (EICC) allows you to complete general education courses through NICC and transfer to EICC for program-specific coursework.

Electroneurodiagnostic Technology is the scientific field devoted to the recording and study of electrical activity of the brain and nervous system. Used for medical evaluation and research, it includes procedures that assess the function of the nervous system. Technologists record electrical activity arising from the brain, spinal cord, peripheral nerves, or somatosensory systems using a variety of techniques and equipment. Technologists also prepare patients for procedures, record electrical potentials, obtain medical histories, calculate results, and maintain equipment. They work with specially trained physicians who interpret the data and provide clinical impressions. Employment opportunities exist in hospitals, clinics, physician offices, research facilities, and epilepsy and sleep centers.

This program is fully accredited by the Joint Review Committee on Education in Electroneurodiagnostic Technology, and graduates are eligible for national examination given by the American Board of Registry of Electroneurodiagnostic Technologists (ABRET).

ENTRANCE REQUIREMENTS

You must complete an application to NICC and a basic skills assessment to take general education coursework at NICC.

A candidate for admission to the Electroneurodiagnotic Technology program at EICC (Scott Community College) must:

1. Submit the EICC admission application in person or by mail. (You will then be placed in the Pre-END category until you are officially accepted into the program.) Applications can be obtained from their Website: www.eicc.edu under "prospective students".

2. Send all high school and college transcripts to:
   Office of the Registrar
   Scott Community College
   500 Belmont Road
   Bettendorf, IA 52722

3. Call (563) 441-4088 to determine if you will need to take their college assessment test.

4. Meet the following academic requirements:
   a. High school graduate or GED of 50 percent or better.
   b. High School GPA of 2.5 or 12 semester hours of completed college work with a "C" or better.
   c. Placement test remedial work completed.

Each allied health student must have an insurance plan to cover any injury or illness requiring hospital treatment or surgery. In addition, all students are required to submit evidence of good health through a physical examination and immunization form. Proof of successful completion of a course in CPR is also required. These requirements will be due after the student starts the program.

AWARD

Associate of Applied Science Degree granted from EICC.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
END:110	*Introduction to END	4.0
END:210	*Electronics and Instrumentation	3.0
HSC:117	Basic Medical Terminology	2.5
Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
END:300	*END I	5.0
END:800	*Clinical Practicum I	4.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
Term Three		
END:320	*END II	2.0
END:820	*Clinical Practicum II	4.0
Term Four		
BIO:255	*Neuroanatomy	3.0
END:340	*END III	3.0
END:840	*Clinical Practicum III	4.0
ENG:105	Composition I	3.0
Term Five		
END:510	*Polysomnography	4.0
END:860	*Clinical Practicum IV	8.0
SPC:112	Public Speaking	3.0
Term Six		
END:410	*Evoked Potentials	2.0
END:880	*Clinical Practicum V	4.0

*Courses offered at Eastern Iowa Community College

ELECTRONIC TECHNOLOGY

This two-year program provides you with job-entry skills as an electronic technician in manufacturing, research and development, installation, and maintenance of electronic equipment. Emphasis is on laboratory work which includes digital and analog circuitry, communications circuitry, and microprocessors. The program accomplishes two goals. First, it develops your analytical skills required to effectively work with state-of-the art microprocessor-based electronic equipment. Second, you will have the option to transfer credits to four-year institutions that recognize the career option agreement.

Electronic technicians work with and under the direct supervision of experienced technicians, engineers, or managers. Jobs are in three primary areas: customer service, including market support, product services, and quality assurance; manufacturing, including assembly, testing and quality control; and product development, including engineering support, assembly, testing and quality assurance.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program. A high school algebra course must be completed prior to entering the program. Additional math and science courses are also helpful. A basic skills assessment must be completed prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

ARTICULATION AGREEMENTS

Articulation agreements are in effect with the following colleges and universities:

Southern Illinois University
University of Northern Iowa
Milwaukee School of Engineering

Suggested Course Sequence

Term One		Credits
BCA:112	Introduction to Data Processing	3.0
CIS:120	Introduction to Programming Logic	2.0
ELT:317	Digital Logic Circuits	2.0
ELT:373	DC Circuit Analysis	4.0
ENG:105	Composition I	3.0
MAT:744	Technical Math	4.0
Term Two		
CIS:603	Visual Basic	2.0
ELT:310	Digital Circuits	4.0
ELT:378	AC Circuit Analysis	4.0
ELT:530	Semiconductors	3.0
PSY:112	Psychology of Human Relations	3.0
Term Three		
ELT:123	Programmable Logic Controllers	3.0
ELT:531	Advanced Semiconductors	3.0
ELT:613	Microprocessors	4.0
SPC:112	Public Speaking	3.0
	General Education Elective	3.0
Term Four		
ELT:410	Electronic Communication Systems	4.0
ELT:580	Microelectronic Circuits	4.0
ELT:715	Introduction to Automation Systems/Robotics	3.0
PHY:710	Technical Physics	3.0
	General Education Elective	3.0

Demonstrated computer literacy is a requirement for graduation. This requirement is built into the program with CIS:120.

EMERGENCY MEDICAL TECHNICIAN-PARAMEDIC

Emergency medical technician-paramedics, working under the direction of a physician (often through radio communication), recognize, assess, and manage medical emergencies of acutely ill or injured patients in prehospital and emergency care settings. EMT-paramedics work principally in advanced life-support units and ambulance services under medical supervision and direction. Some EMT-paramedics are employed by community fire and/or police departments, work for private companies, or may be community volunteers.

Paramedics work with other highly trained individuals to provide quality emergency care in the least amount of time. The AAS degree is an option for both current and potential paramedics. Paramedic training includes classroom instruction, clinical instruction, and field training.

NICC's Iowa Paramedic Program is based upon the National Registry of EMT's 1999 Intermediate Curriculum. Out-of-state students should check with their state for reciprocity.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment in reading and math. A skill-developing activity is available at no cost for those who do not meet the minimum requirements on the first testing. A current State of Iowa EMT-Basic license is required. Current physical, immunization records, and American Heart Health Care Provider CPR or American Red Cross CPR for the Professional Rescuer certification are required before attending the clinical portion of emergency services courses. Prior to the clinical experience, you will also be required to complete a criminal record/child and adult abuse registry check. You must be at least 17 years old prior to enrolling in the EMT-B or EMT-IA-P courses. Graduates will need to show proof of high school graduation or equivalent prior to taking the certification exam(s).

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade avg.) is required to graduate from the program and the college.

Suggested Course Sequence

Term One		Credits
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
EMS:212	Emergency Medical Technician - Basic	4.0
HIT:140	Medical Terminology	4.0
PNN:200	Dosage Calculations	1.0
SDV:060	Time and Stress Management	1.0
*	Computer Elective	1.0-3.0
Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
EMS:212	Emergency Medical Technician - Basic	3.0
PNN:204	Pharmacology Medications	1.0
PSY:121	Developmental Psychology	3.0
*	Communication Elective	3.0
Term Three		
PHI:105	Introduction to Ethics	3.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
*	Communication Elective	3.0
Term Four		
EMS:430	EMT - Iowa Paramedic I	7.0
SOC:208	Introduction to Cultural Anthropology OR	3.0
HUM:108	Cultural Diversity and Identity	3.0
*	General Education Elective	3.0
Term Five		
EMS:435	EMT - Iowa Paramedic II	9.0
EMS:815	Advanced Pediatric Life Support	1.0
EMS:860	Iowa Paramedic Comprehensive Review	1.5
*	General Education Elective	3.0

* General Education Electives:
  Communication Electives: ENG:105, ENG:106, SPC:112
  Computer Electives: BCA:100, BCA;112, BCA:212, SDV:200
  General Education Electives: transfer-level ART, ASL, BIO, CHM, CLS, COM, DRA, ECN, ENG, ENV, FLS, GEO, HIS, HUM, LIT, MAT, MUS, PHI, PHS, POL, PSY, REL, SOC, SPC

**EMT-IA Paramedic I and EMT-IA Paramedic II courses are offered through the University of Iowa (UI), and are available on the ICN if enrollment levels are attained. Students enroll at UI for these courses and pay UI tuition and fees. Credits will apply toward the degree at NICC.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Emergency Medical Technician-Basic Certification Option

EMS:212	Emergency Medical Technician-Basic	7.0

Basic skills assessment not required.

ENOLOGY SPECIALIST

The Enology Specialist program offers a comprehensive examination of the field of enology (wine making) offered through the Viticulture and Enology Science and Technology Alliance (VESTA) consortium of colleges, including Northeast Iowa Community College, Missouri State University, and Shawnee (IL) Community College. The program provides the knowledge required to manufacture and produce wines of the highest quality and provide students with the science, agriculture, and business skills necessary to enhance Iowa's rapidly growing wine industry. Included is a foundation in chemistry, biology, and botany along with specific courses related to cultivar selection, soil preparation, cellar maintenance, and marketing. The program is specifically designed to include field work and laboratory practicum at local wineries.

Most of the Enology Specialist core courses are offered online through VESTA. Students interested in the Enology program should become familiar with VESTA by visiting the VESTA website at www.vesta-usa.org

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program.

AWARD

Associate in Applied Science Degree, Diploma, Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Enology Specialist (AAS)

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
BIO:112	General Biology I	4.0
COM:723	Workplace Communications OR	3.0
SPC:112	Public Speaking	3.0
MAT:102	Intermediate Algebra	4.0
SDV:108	The College Experience	1.0
VIN:146	**Introduction to Enology	2.0
Term Two		
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
ENG:105	Composition I	3.0
PHS:166	Meteorology, Weather, and Climate	4.0
VIN:148	**Winery Sanitation	3.0
Term Three		
BIO:183	Microbiology	3.0
PHY:106	Survey of Physics	4.0
VIN:160	**Winery Equipment Operations	2.0
VIN:246	**Intermediate Enology	3.0
VIN:257	**Wine Production Internship	3.0
VIN:266	Sensory Evaluation	3.0
Term Four		
ENG:108	Composition II: Technical Writing	3.0
POL:111	American National Government	3.0
VIN:111	**Introduction to Viticulture and Vineyard Establishment OR	3.0
VIN:211	**Integrated Pest Management OR	2.0
AGA:142	Soils for Viticulture	3.0
VIN:259	**Cellar Operations Technology	2.0
VIN:268	**Wine and Must Analysis	3.0
VIN:290	Enology Safety	2.0
*	Technical Elective	3.0

*Technical Electives:
ADM:116, ADM:119, ADM:132, ADM:141, ADM:148, ADM:162, ADM:175, ADM:190, ADM:199, ADM:209, ADM:265, ADM:266, ADM:267, ADM:936, BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET:115, NET:134, NET:318, NET:320, NET:453, NET:481, NET:505, NET:946, TRV:113, TRV:114, VIN:270

** Courses completed through VESTA

Computer literacy is required as part of this major. BCA:212 will fulfill this requirement.

(Continued...)

Enology Specialist (Diploma)

Suggested Course Sequence

Term One		Credits
BIO:112	General Biology I	4.0
VIN:146	**Introduction to Enology	2.0
VIN:160	**Winery Equipment Operations	2.0
*	Communication Elective	3.0
*	Technical Elective	3.0

Term Two		
VIN:148	**Winery Sanitation	3.0
VIN:246	**Intermediate Enology	3.0
VIN:259	**Cellar Operations Technology	2.0
VIN:266	Sensory Evaluation	3.0
VIN:268	**Wine and Must Analysis	3.0
VIN:290	Enology Safety	2.0
*	Enology Elective	2.0

Term Three		
VIN:257	**Wine Production Internship	3.0

*Electives:

Communication Electives:
COM:145, COM:155, ENG:021, ENG:105, ENG:106, ENG:221, SPC:112

Enology Electives:
AGA:142, VIN:111, VIN:148, VIN:211, VIN:270, VIN:272

Technical Electives:
BIO, BUS, CHM, CLS, COM, ECN, ENG, ENV, FLS, GEO, HIS, HUM, LIT, MAT, PHI, PHS, PHY, POL, PSY, REL, SOC, SPC; three hours can be taken from BCA:112, BCA:212

** Courses completed through VESTA.

Computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the coursework.

Enology (Certificate)

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
VIN:146	**Introduction to Enology	2.0
VIN:160	**Winery Equipment Operations	2.0
VIN:266	Sensory Evaluation	3.0

Term Two		
AGA:153	Fundamentals of Soil Science	2.0
AGA:157	Soil Fertility	1.0
VIN:148	**Winery Sanitation	3.0
VIN:213	**Midwest Winery Practicum	2.0
VIN:290	Enology Safety	2.0

Term Three		
VIN:257	**Wine Production Internship	3.0

** Courses completed through VESTA.

ENTREPRENEURIAL COSMETOLOGY

(PENDING DEPT. OF EDUCATION APPROVAL)

The purpose of this program is to meet the need of licensed cosmetologists who are seeking to own and operate a small business.The degree will provide the needed training to successfully open and operate a cosmetology business.

ENTRANCE REQUIREMENTS

This program is offered as a result of a partnership with NICC and Capri Cosmetology College. Students will be required to submit a state license in Cosmetology to the NICC registrar and complete the courses listed in order to be awarded an AAS degree in the program. A minimum 2.0 cumulative GPA is required for graduation. Capri and Stewart Cosmetology students do not have to take the Communication course (COM:723) as long as they have passed all Capri communication courses (900-1, 900-2, 900-3, 900-4).

AWARD

Associate in Applied Science Degree

LENGTH

The program is two terms and consists of 21 credit from NICC and the remaining 43 from Capri assuming the students complete the Communication requirement. Normal term schedules for those wanting to complete the program within one year are listed. In addition, these courses can be taken while enrolled at Capri or attending another NICC Cosmetology program.

Suggested Course Sequence

Suggested Course Sequence

Term One		Credits
BUS:130	Introduction to Entrepreneurship	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:110	Introduction to Economics	3.0
*	Communication Elective	3.0

Term Two		
BIO:183	Microbiology OR	3.0
CHM:110	Introduction to Chemistry	3.0
BUS:133	Entrepreneurial Studies	3.0
MKT:110	Principles of Marketing	3.0
PSY:112	Psychology of Human Relations	3.0

*Communication Electives:
COM:723, ENG:105, SPC:112

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Entrepreneurial Studies Certificate

Enhance your vocational degree by obtaining a certificate in Entrepreneurial Studies. U.S. trends show that jobs for entrepreneurs will continue to accelerate. A certificate in Entrepreneurial Studies will assist you in becoming a business owner or in obtaining an advancement in your current job. The goal of this program's curriculum is to help you make the most of the opportunities in your life.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and complete a basic skills assessment prior to being accepted into the program.

AWARD

Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BUS:130	Introduction to Entrepreneurship	3.0
BUS:198	Leadership Skills	3.0
ECN:110	Introduction to Economics	3.0
Term Two		
BUS:132	Introduction to Managerial Decision Making	3.0
BUS:133	Entrepreneurial Studies	3.0
Term Three		
BUS:137	Innovation and Strategic Business Planning	3.0
MKT:298	Seminar in Entrepreneurship	3.0

FIREFIGHTING SPECIALIST

(PENDING DEPT. OF EDUCATION APPROVAL)

This program is designed for firefighters affiliated with an existing paid or volunteer fire department.

Emphasis is placed upon specialized firefighting courses offered through the Iowa Fire Service Training Bureau and the National Education Council for Agricultural Safety Center. This program will expand a firefighter's knowledge and develop leadership for emergency response.

ENTRANCE REQUIREMENTS

Current affiliation with a volunteer or paid fire department. High school graduate or equivalent.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Curriculum

Associate in Applied Science Degree requirements plus:

To receive an Associate in Applied Science degree, a student must complete all of the general education courses and bring in a certificate of completion for the required Firefighting courses and 5 elective Firefighting courses. Students will be given 33 credits for the required and elective Firefighting courses; 33 in addition to the 31 general education courses meets the minimum 64-credit requirement for an AAS degree.

1. A minimum of 64 credit hours, with at least 18 earned at NICC.
2. A minimum GPA of 2.0 and a passing grade in all required courses.
3. Coursework electives (articulated from the Fire Science Bureau).

The firefighting courses are offered by the Fire Science Bureau and are offered at various times and locations throughout the year.

*Offered through the Iowa Fire Service Training Bureau (or equivalent out-of-state certification)
**Offered through the National Education Council for Agriculture Safety (NECAS), Peosta, Iowa

Required Fire Science Courses:
* Essentials of Firefighting I
* Essentials of Firefighting II
* Instructional Techniques for Fire Service Training
* Hazardous Materials: Operations Level
* Driver Operator
* Technical Rescue
* Fire Department Officer I
* Fire Inspection Principles and Practices
** Technical Agricultural Rescue

In addition, at least 5 out of the following 10 courses must be taken as elective Fire Science courses:
* Fire Department Officer II
* Incident Management
* Principles of Building Construction
* Instructional Techniques for Fire Service Training II
* Incident Safety Officer
* Health and Safety Officer
* Strategy and Tactics for Initial Company Operations
* Arson Detection for First Responder
* Emergency Response to Terrorism: Basic Concepts
* EMT-B, Iowa Paramedic, Paramedic Specialist, or EMT-Intermediate (State of Iowa or National Registry)

Term One		Credits
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ECN:120	Principles of Macroeconomics	3.0
ENG:105	Composition I	3.0
MAT:041	Basic Math or higher-level MAT	3.0
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0

Term Two		
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
ECN:130	Principles of Microeconomics	3.0
PHI:105	Introduction to Ethics	3.0
PHY:710	Technical Physics	3.0
SPC:112	Public Speaking	3.0

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Gas Utility Construction and Service

The Gas Utility Construction and Service program prepares students to install, maintain, and operate both high- and low-pressure natural gas distribution systems used to supply residential, commercial, and industrial companies. Program graduates will be qualified to enter one of the most technologically intensive industries in today's economy, with potential careers in gas construction mechanics, gas meter mechanics, gas service mechanics, gas clerk estimation, gas regulator maintenance mechanics, gas appliance repair, and underground facilities location.

Graduates of the program will be able to:

- Communicate technical information
- Operate tools and equipment
- Join pipe
- Install natural gas distribution systems
- Apply customer service skills
- Maintain gas distribution systems
- Operate pipeline excavation equipment
- Service gas appliances
- Secure a commercial drivers' license

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. You will also be required to undergo a drug screening.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
ENG:105	Composition I	3.0
HSC:133	First Aid/CPR	.5
MAT:063	Elementary Algebra	4.0
UTL:100	Gas Utility Field Training I	4.0
UTL:200	Gas Utility Field Training II	5.0
Term Two		
COM:723	Workplace Communications OR	3.0
SPC:112	Public Speaking	3.0
ELE:113	AC/DC Fundamentals	3.0
PHY:710	Technical Physics	3.0
UTL:205	Electronic Controls	4.0
UTL:220	Regulation and Measurement	3.0
WEL:303	Pipe Welding/SMAW	3.0
Term Three		
PSY:112	Psychology of Human Relations	3.0
UTL:210	Pipeline Integrity	3.0
UTL:300	Gas Utility Field Training III	5.0
Term Four		
ENG:108	Composition II: Technical Writing	3.0
MAT:744	Technical Math	4.0
UTL:230	Gas Appliances	3.0
UTL:400	Gas Utility Field Training IV	4.0
WEL:200	Metallurgy Fundamentals	2.0
Term Five		
IND:118	Commercial Drivers License	1.0
PHS:193	Introduction to GIS	3.0
UTL:240	OQ Modules (Operator Qualification)	3.0
UTL:250	Gas Utilities Internship	5.0

Demonstrated computer literacy is a requirement for graduation. For this program the requirement is met with course BCA:212.

GRAPHIC DESIGN

The Graphic Design program is a design-based educational program that equips students with skills and materials necessary to compete for professional design positions upon graduation. Additionally, students are well-prepared to major in design, marketing, communications, or journalism if they choose to continue their education.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		**Credits**
BCA:112	Introduction to Data Processing OR	3.0
BCA:212	Introduction to Computer Business Applications	3.0
CIS:120	Introduction to Programming Logic	2.0
GRA:110	Graphic Arts Principles	3.0
GRA:151	Web Design	3.0
*	General Education Elective	3.0
Term Two		
GRA:109	History of Graphic Design	2.0
GRA:143	Photoshop I	2.0
GRA:158	Web Multimedia	3.0
GRA:179	Publication Software	3.0
GRA:230	Exploring Photography	2.0
*	General Education Elective	3.0
Term Three		
ART:101	Art Appreciation OR	3.0
ART:203	Art History I OR	3.0
ART:204	Art History II OR	3.0
DRA:112	American Film	3.0
ART:120	Two-Dimensional Design OR	3.0
ART:133	Drawing I	3.0
GRA:120	Illustrator	2.0
*	General Education Elective	3.0
Term Four		
GRA:122	Graphic Illustration Tools	3.0
GRA:148	Photoshop II	2.0
GRA:173	Typography	3.0
GRA:210	Graphic Layout and Design	3.0
GRA:260	Issues in Media Communications	2.0
MKT:110	Principles of Marketing OR	3.0
MKT:150	Principles of Advertising	3.0
Term Five		
GRA:113	Electronic Prepress and Printing	2.0
GRA:310	Advanced Graphic Layout and Design	3.0
GRA:800	Graphic Design Portfolio Seminar	3.0
GRA:805	Graphic Design Occupational Experience	3.0
*	General Education Elective	3.0

*** General Education Electives:**

Two Communication Electives: ENG:105 and SPC:112
One Math/Science Elective: MAT:102, MAT:744, transfer-level BIO, CHM, ENV, MAT, PHS, PHY
One Sociology/Psychology Elective: PSY:111, PSY:112, PSY:251, SOC:110, SOC:208

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

HEALTH INFORMATION TECHNOLOGY

The Health Information Technician is responsible for ensuring that medical information is collected and maintained for every patient. The technician also performs data analysis and research of health information to meet the needs of health care professionals.

The Health Information Technology programs prepare you to work in a variety of health care settings. If you are pursuing a health career, you have the option of choosing the Coding Specialist (diploma) or Health Information Technology (AAS). These programs contain classroom, lab, and professional practice experience.

The Health Information Technology program (AAS) is accredited by the Commission on the Accreditation for Health Informatics and Information Management (CAHIIM) in cooperation with the American Health Information Management Association's Council on Accreditation.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Current physical and immunization records are required prior to the start of the clinical affiliations. You will also be required to complete a criminal background and abuse registry checks ffor some clinical affiliations. A positive report may prevent you from attendance in professional practice experience and completion of program.

AWARD

Associate in Applied Science Degree and/or Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Health Information Technology (AAS)

The AAS option has been designed for the student who, after completing the two-year Associate of Applied Science degree, will be eligible to apply to write the national qualifying examination for certification as a Registered Health Information Technician (RHIT). This program, which contains classroom, lab, and professional practice experiences, prepares students for employment in health care settings to be responsible for maintaining the completeness of patient records.

Suggested Course Sequence

Term One		Credits
BCA:112	Introduction to Data Processing	3.0
BIO:165	Human Anatomy and Physiology I	3.0
HIT:140	Medical Terminology	4.0
HIT:320	Health Records Management	2.0
HIT:330	Health Care Delivery Systems	2.0
*	Communication Elective	3.0
Term Two		
BCA:212	Introduction to Computer Business Applications	3.0
BIO:170	Human Anatomy and Physiology II	3.0
HIT:165	Principles of Diseases	4.0
HIT:215	Introduction to CPT	2.0
HIT:230	Introduction to Medical Coding	3.0
HIT:420	Legal Aspects of Health Information	2.0
HIT:540	Professional Practice Experience I	1.5
Term Three		
BCA:213	Intermediate Computer Business Applications OR	3.0
CIS:303	Introduction to Database	3.0
HIT:240	Advanced Coding and Classification	3.0
HIT:280	CPT-4 Coding	3.0
HIT:292	Reimbursement Methodologies	2.0
HIT:351	Health Information Systems	2.0
*	Communication Elective	3.0
*	Social Science Elective	3.0
Term Four		
HIT:340	Comparative Records	2.0
HIT:445	Quality Management of Organizational Resources	4.0
HIT:450	Health Statistics	2.0
HIT:541	Professional Practice Experience II	3.0
HIT:946	Seminar	2.0

*General Education Electives:
Communication Electives: ENG:105, ENG:106, SPC:112
Social Science Electives: PSY:111, PSY:112, SOC:110

(Continued. . .)

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Coding Specialist (Diploma)

The Coding Specialist option has been designed for the student who wants to be employed in health care settings to do coding activities for health care reimbursement purposes.

This program includes classes in word processing as well as science and an understanding of medicine. You must have a working knowledge of anatomy and physiology, medical terminology, disease processes, coding classification, and reimbursement systems.

Prior to the clinical experience, you will be required to complete a criminal/child and adult abuse registry check. A positive report may prevent attendance in professional practice experience and completion of the program. Current physical and immunization records are reuqired prior to clinical affiliations.

The Coding Specialist program is designed to ladder into the Health Information Technology program.

Suggested Course Sequence

Term One		Credits
BIO:165	Human Anatomy and Physiology I	3.0
HIT:140	Medical Terminology	4.0
HIT:320	Health Records Management	2.0
HIT:330	Health Care Delivery Systems	2.0
*	Communication Elective	3.0
*	Computer Science Elective	3.0
Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
HIT:165	Principles of Diseases	4.0
HIT:215	Introduction to CPT	2.0
HIT:230	Introduction to Medical Coding	3.0
HIT:420	Legal Aspects of Health Information	2.0
HIT:540	Professional Practice Experience I	1.5
Term Three		
HIT:240	Advanced Coding and Classification	3.0
HIT:280	CPT-4 Coding	3.0
HIT:292	Reimbursement Methodologies	2.0
HIT:351	Health Information Systems	2.0
*	Elective	3.0

***Electives:**

Communication Electives: ENG:105, ENG:106, SPC:112

Computer Elective: BCA:212 preferred

Electives: BCA:112, BCA:213, HIT:xxx, PSY:111, PSY:112, SOC:110

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For these programs the computer literacy requirement is built into the program coursework.

HEATING AND AIR CONDITIONING

Learn the competencies required for successful heating and air conditioning mechanics. Competencies include installation and repair of equipment ranging in size from small residential systems to light commercial systems. You will also have the opportunity to learn how to install, diagnose, and repair electric, gas-fired, and oil-fired furnaces, motors, compressors, and evaporators, as well as following blueprints and design specifications.

ENTRANCE REQUIREMENTS

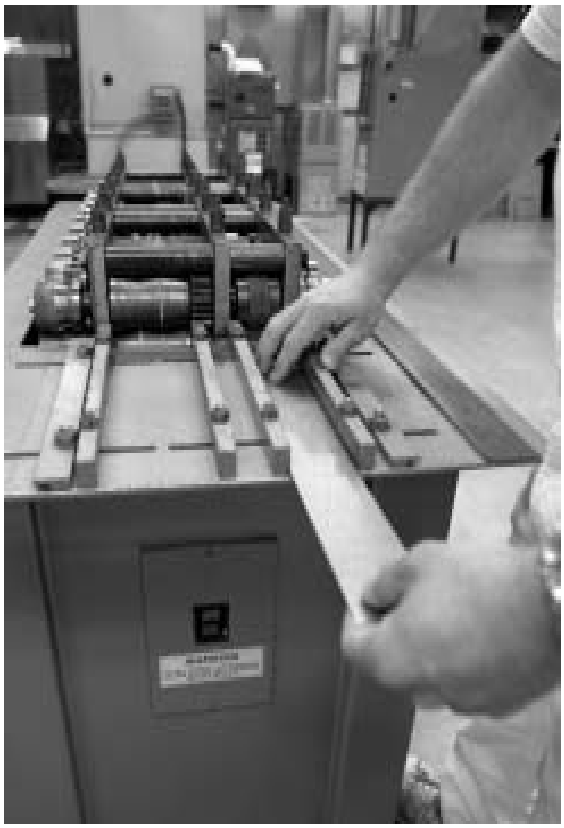
You must have the ability and interest to profit from the program, and complete a basic skills assessment prior to acceptance into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.



Suggested Course Sequence

Term One		Credits
HCR:117	Introduction to Forced Air Heat	2.0
HCR:122	Gas Furnaces	5.0
HCR:403	Basic Electricity	4.0
HCR:515	Sheet Metal Fabrication	3.0
WEL:330	Welding Fundamentals	1.0
*	Math Elective	3.0-4.0

Term Two		
HCR:108	Heating and Air Conditioning Trade Codes	2.0
HCR:123	Oil Furnaces	2.0
HCR:124	Hydronic Heat	1.0
HCR:202	Introduction to Cooling	3.0
HCR:204	Principles of Air Conditioning	4.0
HCR:506	Air Distribution	3.0
*	Communication Elective	3.0

Term Three		
HCR:128	Principles of Electric Heat	2.0
HCR:141	Principles of Heat Pumps	3.0
HCR:815	Air Purification and Humidity	2.0
HCR:941	Practicum	1.5
HSC:133	First Aid/CPR	.5
*	Computer Elective	1.0-3.0

* Electives:

Communication Electives: COM:020, COM:723, ENG:013, ENG:021, ENG:105

Computer Electives: BCA:100, BCA:112, BCA:212, SDV:200

Math Electives: MAT:041, MAT:053, MAT:063, MAT:102, MAT:744, transfer-level MAT

Note: EPA Freon Certification Test will be given if you seek to become certified in handling and purchasing freon.

The computer literacy requirement is built into the program's coursework.

HUMAN SERVICES GENERALIST

The Human Services Generalist program prepares you to enter the workplace in a variety of human service agencies, services, and delivery systems. This two-year degree will provide a strong foundation for a professional career in the human service arena. There is a wide choice of major electives in combination with a strong human services core curriculum. Actual field experience in community human service settings is also included under the guidance of working professionals.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Prior to the field experience, you will be required to complete a criminal record/child and adult abuse registry check. A positive report may prevent you from attendance in clinical and completion of the program.

AWARD

Associate in Applied Science

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
HSV:150	Human Services Technology I	3.0
HSV:162	Introduction to Human Disabilities and Services	3.0
PSY:111	Introduction to Psychology	3.0
SOC:110	Introduction to Sociology	3.0
SPC:112	Public Speaking	3.0

Term Two		
ENG:105	Composition I	3.0
HSC:133	First Aid/CPR	.5
HSV:151	Human Services Technology II	3.0
HSV:250	Essentials of Behavioral Modifications	3.0
PSY:121	Developmental Psychology OR	3.0
SOC:140	Human Behavior in the Social Environment	3.0
PSY:241	Abnormal Psychology	3.0

Term Three		
HSV:225	Counseling Techniques	3.0
HSV:255	Addictive Disease Concepts	3.0
HSV:847	Human Services Field Experience I	2.5
*	General Education Elective	3.0
*	Major Elective	3.0
*	Science Elective OR	3.0
*	Math Elective	3.0-4.0

Term Four		
HSV:848	Human Services Field Experience II	1.25
HSV:849	Human Services Field Experience III	1.25
PSY:226	Psychology of Aging	3.0
*	Criminal Justice Elective OR	3.0
*	General Education Elective	3.0
*	Humanities Elective	3.0
*	Major Elective	3.0

*Electives:

General Education Electives:

Humanities Electives: ART:101, ART:203, ART:204; transfer-level ASL, DRA, CLS, FLS, HUM, LIT, MUS, PHI, REL

Math Electives: transfer-level MAT

Science Electives: transfer-level BIO, CHM, ENV, PHS, PHY

Criminal Justice Electives: CRJ:100, CRJ:120, CRJ:201

Major Electives:

ASL:131, ASL:161, CRJ:100, CRJ:120, CRJ:200, EDU:175/HSV:162, HSV:260, HSV:280, transfer-level PHI, PSY, SOC.

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

Paraeducator Certification Option

For Paraeducator Certification, see Education AA, Paraeducator Certification.

HUMAN SERVICES TECHNICIAN

The Human Services Technician program is designed to prepare you for entry-level positions in community agencies and institutional settings. Basic skills essential for working with persons in need of assistance will be developed. The Human Services Technician is prepared to work in direct personal contact providing help to the person in need, generally working under the direction of a professional. Employment opportunities include, but are not limited to, paraprofessional jobs in schools and agencies serving persons with mental illness, mental retardation, physical handicaps, behavior disorders, economic deprivation, or substance abuse.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Prior to the field experience, you will be required to complete a criminal record/child and adult abuse registry check. A positive report may prevent you from attendance in clinical and completion of the program.

AWARD

Diploma

Note: Students interested in an associate degree should consider the Human Services Associate in Arts Degree or the Human Services Generalist Associate in Applied Science degree.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
HSC:133	First Aid/CPR	.5
HSV:150	Human Services Technology I	3.0
HSV:162	Introduction to Human Disabilities and Services	3.0
PSY:111	Introduction to Psychology	3.0
SOC:110	Introduction to Sociology	3.0
Term Two		
HSV:151	Human Services Technology II	3.0
HSV:250	Essentials of Behavioral Modifications	3.0
PSY:121	Developmental Psychology OR	3.0
SOC:140	Human Behavior in the Social Environment	3.0
PSY:226	Psychology of Aging	3.0
PSY:241	Abnormal Psychology	3.0
Term Three		
ENG:105	Composition I OR	3.0
SPC:112	Public Speaking	3.0
HSV:847	Human Services Field Experience I	2.5
HSV:848	Human Services Field Experience II	1.25
SDV:135	Job Seeking Skills	1.0

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

MARKETING

The sales-oriented marketing individual who performs selling functions in a professional manner ensures the repeat business of satisfied customers. Though contact with customers is a major part of all sales jobs, there are differences in the duties, skills, and responsibilities of salespeople. General knowledge and understanding of the business environment and appropriate merchandising, display, and effective personal selling are all important to the successful marketing professional. Your skills are developed in these areas so that you can immediately be a valuable addition to an organization. An instructor-supervised work experience is incorporated into the program. After graduation you will find career opportunities in businesses such as apparel shops, hardware, variety, discount, and department stores.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BUS:103	Introduction to Business	4.0
BUS:185	Business Law I	3.0
MKT:140	Principles of Selling	3.0
MKT:275	Marketing Occupational Experiences I	2.0
*	Psychology Elective	3.0
Term Two		
MKT:110	Principles of Marketing	3.0
MKT:150	Principles of Advertising	3.0
SDV:135	Job Seeking Skills	1.0
BCA:212	Introduction to Computer Business Applications	3.0
*	Communication Elective	3.0
*	General Education Elective	3.0

*Electives:

One Communication Elective:
COM:020, COM:723, ENG:021, ENG:105, SPC:112

One General Education Elective:
ART, ASL, BIO, CHM, CLS, COM:145, COM:155, DRA, ECN, ENG:021, ENG:105, ENG:106, ENG:221, ENV, FLS, HIS, HUM, LIT, MAT, MUS, PHI, PHS:142, PHS:143, PHS:170, PHS:171, PHY, POL, PSY, REL, SOC, SPC

Psychology Elective: PSY

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program course work.

MARKETING MANAGEMENT

Marketing management personnel must work very effectively with all people. In addition, they must be adept at analyzing people's reactions to a variety of situations and govern their actions accordingly. An effective manager needs to be proficient in planning, organizing, directing, and evaluating business activities. Oral and written communications play a vital role in transmitting product and management ideas to customers, employees, and supervisors.

The program of study combines classroom work and on-the-job training to teach skills needed in business operation and management functions. After graduation you may seek employment as an owner, operator or assistant manager in retail operations, management trainee in an industrial setting, personnel manager, or another mid-management position.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BUS:103	Introduction to Business	4.0
MGT:102	Principles of Management	4.0
MKT:140	Principles of Selling	3.0
MKT:275	Marketing Occupational Experiences I	2.0
*	Psychology Elective	3.0
Term Two		
BCA:212	Introduction to Computer Business Applications	3.0
BUS:185	Business Law I	3.0
MKT:110	Principles of Marketing	3.0
MKT:150	Principles of Advertising	3.0
*	Communication Elective	3.0
Term Three		
MKT:276	Marketing Occupational Experiences II	6.0
SDV:135	Job Seeking Skills	1.0
*	Technical Elective	3.0
Term Four		
ACC:115	Introduction to Accounting OR	4.0
ACC:152	Financial Accounting	4.0
MGT:170	Human Resource Management	3.0
MKT:277	Marketing Occupational Experiences III	2.0
*	Math/Science Elective	3.0
Term Five		
BUS:180	Business Ethics	3.0
MKT:278	Marketing Occupational Experiences IV	2.0
MKT:298	Seminar in Entrepreneurship	3.0
*	General Education Elective	3.0
*	Social Science/Humanities Elective	3.0
*	Technical Elective	3.0

*** Electives:**

Communication Electives: COM:145, COM:155, COM:723, ENG:105, SPC:112

General Education Electives: transfer-level ART, ASL, BCA:112, BIO, CHM, CLS, COM:145, COM:155, DRA, ECN, ENG:105, ENG:106, ENG:221, ENV, FLS, HIS, HUM, LIT, MAT, MUS, PHI, PHS, PHY, POL, PSY, REL, SOC, SPC

Math/Science Electives:

Math: MAT:102, MAT:744, transfer-level MAT

Science: transfer-level BIO, CHM, ENV, PHS, PHY

Psychology Elective: transfer-level PSY

Social Science/Humanities Electives: transfer-level ART, CLS, DRA, FLS, HIS, HUM, LIT, MUS, PHI, PSY or SOC, REL

Technical Elective: ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET (excluding NET:116, NET:146, NET:150), TRV

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

MEDICAL LABORATORY TECHNICIAN

The Medical Laboratory Technician program offers you the opportunity to take two semesters of study at NICC and then a summer term and one semester at Hawkeye Community College (HCC) in Waterloo before completing the 24-week clinical internship. NICC and NIACC are academic affiliates of the MLT program at HCC.

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

Graduates of this program may take a national certification examination. Because of the increased demand for laboratory services, certified workers are needed in hospital laboratories, clinics, physicians' offices, public health agencies, research institutions, and the armed forces. Upon graduation, you may also continue your education at a four-year institution to become a medical technologist.

The Medical Laboratory Technician program is accredited by the National Accrediting Agency for Clinical Laboratory Science.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program. Current physical and immunization records are required prior to the start of the clinical laboratory courses. You may also be required to complete a criminal record/child and adult abuse registry check for some clinical affiliations. A positive report may prevent you from attendance in clinical and completion of the program. You may be required to take preparatory courses in math, biology, and chemistry prior to entering college courses.

AWARD

Associate in Applied Science Degree from HCC.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One**		Credits
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
HIT:140	Medical Terminology	4.0
MLT:101	*Introduction to Lab Science	2.0
SPC:112	Public Speaking	3.0

Term Two**		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
BIO:183	Microbiology	3.0
BIO:184	Microbiology Lab	1.0
ENG:105	Composition I	3.0
MLT:120	*Urinalysis	3.0
SOC:110	Introduction to Sociology OR	3.0
PSY:111	Introduction to Psychology	3.0

Summer session and second year are completed with Hawkeye Community College

Term Three		
MLT:110	Fundamental Lab Techniques	3.0
MLT:130	Hematology	3.0
MLT:250	Clinical Microbiology	4.0

Term Four		
MLT:130	Advanced Hematology	3.0
MLT:233	Hemostasis and Thrombosis	2.0
MLT:240	Clinical Chemistry I	7.0
MLT:252	Parasitology	1.0
MLT:260	Immunohematology I	4.0
MLT:270	Immunology and Serology	2.0

Term Five		
MLT:283	Clinical Practicum: Urinalysis	1.0
MLT:284	Immunohematology	2.0
MLT:285	Clinical Practicum: Chemistry	4.0
MLT:286	Clinical Practicum: Immunology and Serology	1.0
MLT:287	Clinical Practicum: Hematology	4.0
MLT:288	Clinical Practicum: Microbiology	4.0
MLT:291	Lab Survey and Review	1.0

*May be available on each campus, or offered jointly by any or all schools participating in this shared program.

**Term 1: BIO:163 may be taken at HCC in place of BIO:165 and BIO:167 at NICC.
Term 2: BIO:113 or CHM:132 may be taken at HCC in place of BIO:170 and BIO:172 at NICC.

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is required for graduation. This requirement may be met by completion of a high school or college computer literacy course acceptable to the department or completion of a proficiency exam.

MEDICAL TRANSCRIPTIONIST

Medical transcriptionists translate and edit recorded dictation by physicians and other health care providers regarding patient assessment and treatment. To understand and accurately transcribe reports, you must understand the language of medicine, human biology, diagnostic procedures, and treatment. You will transcribe the dictated reports and return them in either printed or electronic form to the dictator for review and signature or correction. These reports eventually become a part of the patient's permanent file.

The program includes classes in word processing as well as science and medical terminology. In addition, this program, which contains classroom and lab experiences, will prepare you for employment in physicians' offices and health care facilities, and you may be able to work at home.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
ADM:116	Keyboarding II	3.0
BIO:165	Human Anatomy and Physiology I	3.0
HIT:140	Medical Terminology	4.0
HIT:320	Health Records Management	2.0
HIT:330	Health Care Delivery Systems	2.0
*	Communication Elective	3.0
Term Two		
ADM:119	Keyboarding III	3.0
BIO:170	Human Anatomy and Physiology II	3.0
HIT:165	Principles of Diseases	4.0
HIT:420	Legal Aspects of Health Information	2.0
HIT:603	Medical Transcription	4.0
Term Three		
BCA:212	Introduction to Computer Business Applications	3.0
MTR:145	Advanced Medical Transcription	4.0
*	Social Science Elective	3.0

* Electives:

One Communication Elective: ENG:105, ENG:106, SPC:112

One Social Science Elective: PSY:111, PSY:112, SOC:110

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program, the computer literacy requirement is built into the program coursework.

OFFICE TECHNOLOGY

The office assistant plays an important role in the operation of a successful business and often holds positions involving considerable responsibility. You have the choice of pursuing the Secretarial, Legal or Medical options.

Duties include organizing the office, typing, taking dictation, transcribing, handling correspondence, sorting mail, filing, answering the telephone, greeting customers, operating a variety of office machines, making travel arrangements, scheduling appointments, and maintaining records. The office assistant is able to interpret the needs of the employer, maintain poise and friendliness, and apply good human relations principles at all times.

Upon graduating, you may be employed as a secretary, medical secretary, legal secretary, stenographer, clerk, receptionist, typist, recordkeeper, or information processor.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Demonstrated computer literacy is a requirement for graduation. For the following Office Technology programs, the computer literacy requirement is built into the program course work.

Suggested Course Sequence

Legal (Diploma)

Term One		Credits
ADM:116	Keyboarding II	3.0
ADM:162	Office Procedures	3.0
BCA:212	Introduction to Computer Business Applications	3.0
LGL:110	Introduction to Paralegal Studies	4.0
*	Communication Elective	3.0
Term Two		
ADM:119	Keyboarding III	3.0
BUS:180	Business Ethics	3.0
BUS:185	Business Law I	3.0
SDV:135	Job Seeking Skills	1.0
*	Math Elective	3.0
*	Psychology Elective	3.0
*	Technical Elective	3.0
Term Three		
ADM:148	Transcription	2.0
ADM:936	Occupational Experience	4.0
*	Technical Electives	6.0

* Electives:

Communication Electives: COM:020, COM:723, ENG:013, ENG:021, ENG:105, SPC:112

Math Electives: MAT

Psychology Electives: PSY

Technical Electives: ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, HIT, LGL, MGT, MKT, MTR:145, NET (excluding NET:116, NET:146, NET:150), TRV

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Medical (Diploma)

Term One		Credits
ADM:116	Keyboarding II	3.0
ADM:162	Office Procedures	3.0
BCA:212	Introduction to Computer Business Applications	3.0
HIT:140	Medical Terminology	4.0
HIT:320	Health Records Management	2.0
HIT:330	Health Care Delivery Systems	2.0
Term Two		
ADM:119	Keyboarding III	3.0
BCA:213	Intermediate Computer Business Applications	3.0
BIO:157	Human Biology	4.0
ENG:013	Basic Writing	3.0
HIT:420	Legal Aspects of Health Information	2.0
HIT:603	Medical Transcription	4.0
*	Technical Elective	1.0
Term Three		
ADM:936	Occupational Experience	4.0
PSY:112	Psychology of Human Relations	3.0
SDV:135	Job Seeking Skills	1.0
*	Math Elective	3.0

* Electives:

Math Elective: any non-developmental MAT elective

Technical Electives: ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, HIT, LGL, MGT, MKT, MTR:145, NET (excluding NET:116, NET:146, NET:150), TRV

Secretarial (Diploma)

Term One		Credits
ADM:116	Keyboarding II	3.0
ADM:162	Office Procedures	3.0
BCA:212	Introduction to Computer Business Applications	3.0
ENG:013	Basic Writing	3.0
PSY:112	Psychology of Human Relations	3.0
*	Math Elective	3.0
Term Two		
ACC:115	Introduction to Accounting	4.0
ADM:119	Keyboarding III	3.0
ADM:175	Records and Database Management	2.0
BCA:213	Intermediate Computer Business Applications	3.0
BUS:121	Business Communications	3.0
SDV:135	Job Seeking Skills	1.0
Term Three		
ADM:148	Transcription	2.0
ADM:936	Occupational Experience	4.0
BUS:103	Introduction to Business	4.0
*	Technical Elective	4.0

* Electives:

Math Elective: any non-developmental MAT elective

Technical Electives: ACC, ADM (excluding ADM:106), BCA, BUS, CIS, CSC, ECN, FIN, GRA, HIT, LGL, MGT, MKT, MTR:145, NET (excluding NET:116, NET:146, NET:150), TRV

PRACTICAL NURSING

This program of classroom, lab, and clinical experience will prepare you for employment in hospitals, nursing homes, and a variety of other health care facilities. The Practical Nurse gives nursing care to patients under the supervision of the Registered Nurse (RN). You assist RNs in providing care to patients in more complex situations. Following successful completion of the program, you are eligible to write the National Licensure Examination (NCLEX) to become a Licensed Practical Nurse (LPN).

Nursing courses with a clinical component may not be taken by a person who has been denied nursing licensure by a board of nursing; whose nursing license is currently suspended, surrendered, or revoked in any U. S. jurisdiction; whose nursing license/registration is currently suspended, surrendered, or revoked in another country due to disciplinary action.

CLASS HOURS

Classes are scheduled two or three days a week at the campus. Clinical experiences are scheduled the remaining days in hospitals, nursing homes, and other care settings and can occur on either the day or evening shift. An evening/weekend program option is available beginning each fall semester. For further information, contact the NICC Admissions Office.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment in reading and math and have passed Human Anatomy and Physiology I with lab component with a C- or above prior to being accepted into the program. A skill developing activity is available at no cost if you do not meet the minimum requirements on the first testing. Students may transfer into the freshman year only after transcript review, space availability, and Dean of Health approval. All nursing students are required to attend a program orientation prior to entrance into the program. Notification of dates and times will occur after acceptance to the Nursing program. In addition, the following requirements must be satisfied prior to or during term one of NICC's Nursing program.

Nursing Concepts is in term two of the Nursing program and is the first clinical course. If any of the following are not completed prior to starting Nursing Concepts, your opening in the program will be forfeited and offered to another student. The student who does not successfully satisfy the following program requirements will be placed at the bottom of the waiting list after submission of the required paperwork.

- Completion, with a grade of C- or better, of the following general education courses:
  - Human Anatomy and Physiology II with lab
  - Dosage Calculations
- Submission of current physical and immunization records.
- *Completion of an American Heart Association HealthCare Provider CPR or American Red Cross CPR for the Professional Rescuer certification. A copy of your current CPR certification must be submitted.
- Clearance on a criminal, dependent adult and child abuse background screening. You will receive information regarding the screenings after acceptance into the Nursing program. Note: A positive report may prevent you from attendance in clinical and completion of the program.
- *Successful completion of a 75-hour Certified Nurse Aide (CNA) course from a community college or an approved CNA course provider. A copy of your certificate must be submitted. Please contact NICC Continuing Education, 563-562-3263 ext . 399, to arrange a course.
- *Completion of the written and skill competency tests for the CNA registry. A copy of your CNA registry results must be submitted.

Items indicated with an * may be submitted immediately. Verification materials should be submitted to:

Northeast Iowa Community College
Health Department Secretary
10250 Sundown Road
Peosta, IA 52068

You may be required to provide documentation of health insurance coverage and undergo drug screening. Please be aware of the following physical demands during your clinical education courses. Daily activities require bending, stooping, squatting, reaching, pushing, and pulling in all directions. You will be asked to lift and carry objects weighing up to a minimum of 50 pounds and also shared weight. Clinical tasks require use of hands for repetitive action such as simple and firm grasping and fine manipulation and walking, including stair stepping. You may also be in contact with communicable diseases and chemical/biohazardous materials and odors. For clinical assessments, visual and hearing acuity is essential. Travel to clinical sites in outlying areas will be required at times throughout the program. Students are responsible for

(Continued...)

any travel costs. You will need to show proof of high school graduation or equivalent prior to taking the NCLEX licensure exam. The Iowa Board of Nursing will no longer review criminal history prior to application for licensure.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested course sequence

(For summer entry)

Term One		Credits
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
ENG:105	Composition I	3.0
PNN:200	Dosage Calculations	1.0
Term Two		
PNN:174	Nursing Concepts	7.0
PNN:204	Pharmacology Medications	1.0
PNN:270	Introduction to Nutrition	2.0
PNN:527	Nursing Care of Adults I	3.5
PSY:121	Developmental Psychology	3.0
Term Three		
PNN:529	Dimensions of Practical Nursing	4.25
PNN:410	Nursing Care of Children	2.0
PNN:432	Nursing Care of the Childbearing Family	2.25
PNN:528	Nursing Care of Adults II	6.0

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

NOTE: The following year rules exist for nursing program coursework. If exceeded, the course(s) will need to be repeated. Nursing courses and Anatomy and Physiology courses cannot be greater than five years old.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

RADIOLOGIC TECHNOLOGY

A radiographer is a vital member of the health care team. The radiographer's responsibilities range from obtaining diagnostic information to assisting physicians with complex procedures. The radiographer must be able to recognize emergency situations and react quickly to various patient conditions. The radiographer works in diverse settings, including hospitals, clinics, and physicians' offices.

The Radiologic Technology Program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The mission of the program is to provide an ambitious didactic and clinical education that will produce compassionate, confident, and professional technologists. The program will provide a variety of work settings and experiences to successfully prepare graduates to function as entry-level radiographers. Upon graduation, a qualified graduate will be eligible to take the national registry examination, thereby becoming a certified Registered Radiographer. Students will rotate through multiple clinical sites within an 80- mile radius of Dubuque.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment in reading and math and meet the minimum entrance requirements prior to acceptance into the program. A skill developing activity is available at no cost if you do not meet the minimum requirements on the first testing. Current American Heart Health Care Provider CPR or the American Red Cross CPR for the Professional Rescuer certification, physical, and immunization records are required before attending the clinical portion of the radiologic technology courses. Prior to the clinical experience, you will also be required to complete a criminal record/child and adult abuse registry check. A positive report may prevent you from attendance in clinical and completion of the program. You may also be required to provide documentation of health insurance coverage and undergo drug screening.

You need to be aware of the following physical demands during your clinical education courses. Daily activities require bending, stooping, squatting, reaching, pushing, and pulling in all directions. You will be asked to lift and carry objects weighing up to a minimum of 50 pounds and also shared weight. Clinical tasks require use of hands for repetitive action such as simple and firm grasping and fine manipulation, and walking, including stair stepping. You may also be in contact with communicable diseases and chemical/biohazardous materials and odors. Prior to clinical assignments you will be instructed about the radiation hazards to an embryo/fetus.

AWARD

Associate in Applied Science Degree

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
HSC:117	Basic Medical Terminology	2.5
RAD:101	Radiographic Patient Care	3.0
RAD:121	Radiographic Procedures I	3.5
RAD:200	Clinical Education I	3.0
Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
RAD:145	Radiographic Procedures II	3.0
RAD:240	Clinical Education II	5.0
RAD:440	Image Evaluation	4.0
Term Three		
ENG:105	Composition I OR	3.0
SPC:112	Public Speaking	3.0
RAD:280	Clinical Education III	5.0
RAD:410	Introduction to Specialized Imaging	1.0
RAD:420	Radiographic Physics	4.0
Term Four		
RAD:185	Special Procedures and Pharmacology	3.0
RAD:520	Clinical Education IV	7.0
RAD:709	Radiographic Image Exposure	3.0
RAD:711	Radiographic Digital Imaging	1.0
RAD:860	Radiobiology and Radiation Protection	2.5
Term Five		
RAD:560	Clinical Education V	7.0
RAD:720	Radiographic Imaging	3.0
RAD:740	Radiographic Pathology	2.5
MAT:xxx	Math Elective	3.0
Term Six		
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
RAD:590	Clinical Education VI	3.5
RAD:660	Comprehensive Radiologic Review	2.5

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C-grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

RESPIRATORY CARE

Respiratory care practitioners are allied health specialists who play a crucial role within the health care team. Working closely with physicians and other health care professionals, they care for patients with respiratory and cardiovascular conditions. Under the supervision of a physician, they are involved with the assessment, treatment, diagnostic testing, rehabilitation, and prevention of conditions that affect the respiratory and cardiovascular systems. Employment opportunities are found in hospitals, clinics, home health care agencies, product support and sales, education, rehabilitation and continuing care, and health/disease prevention programs.

The Respiratory Care program can be completed entirely through the Peosta Campus or as part of a transfer arrangement between Northeast Iowa Community College (NICC) and Eastern Iowa Community College (EICC). As part of the consortium, general education courses may be taken at EICC and the respiratory care courses will be offered at NICC on the Peosta Campus.

When you graduate with an Associate of Applied Science (AAS) degree, you are eligible for credentialing exams offered by the National Board for Respiratory Care (NBRC). The program is accredited by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP) and the Committee on Accreditation for Respiratory Care (CoARC).

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment in reading and math and meet the minimum entrance requirements prior to acceptance into the program. A skill developing activity is available at no cost if you do not meet the minimum requirements on the first testing. Current physical, immunization records, and American Heart Health Care Provider CPR or the American Red Cross CPR for the Professional Rescuer certification are required before attending the clinical portion of the respiratory care courses.

You need to be aware of the following physical demands during your clinical education courses. Daily activities require bending, stooping, squatting, reaching, pushing, and pulling in all directions. You will be asked to lift and carry objects weighing up to a minimum of 50 pounds and also shared weight. Clinical tasks require use of hands for repetitive action such as simple and firm grasping and fine manipulation, and walking, including stair stepping. You may also be in contact with communicable diseases and chemical/biohazardous materials and odors. Prior to the clinical experience, you will also be required to complete a criminal record/child abuse registry check. A positive report may prevent you from attendance in clinical and completion of the program. You may also be required to provide documentation of health insurance coverage and undergo drug screening. You may need to show proof of high school graduation or equivalent prior to taking the credentialing exam.

You will be eligible for Advanced Standing in NICC's Respiratory Care program if you: 1) provide proof of the CRT or CRTT credential from the National Board for Respiratory Care; 2) have graduated from an educational program supported by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) or its predecessor; 3) have two recent years of respiratory care experience; and 4) submit a professional profile with letters of recommendation from the Manager/Supervisor and Medical Director of your department. The granting of Advanced Standing accepts you into NICC's Respiratory Care program, waiving the first three terms of the program and beginning clinical coursework with RCP:820 Respiratory Therapy Techniques IV. As an Advanced Standing student, you must also complete ENG:105, BIO:183, BIO:184, RCP:600, RCP:830, RCP:840.

AWARD

Associate in Applied Science Degree

CLASS HOURS

Classes are scheduled two or three days per week at the Peosta Campus. Clinical experiences are scheduled at the affiliate hospitals and home care providers located within a 75-mile radius of the campus. The clinical experience greatly enhances your education. You may work day or evening shifts, and you must provide your own transportation and lodging when necessary. Car pools are considered when making assignments to the clinical areas.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

(Continued...)

Suggested Course Sequence

		Credits
Term One		
BIO:165	Human Anatomy and Physiology I	3.0
BIO:167	Human Anatomy and Physiology I Lab	1.0
HSC:117	Basic Medical Terminology	2.5
RCP:270	Respiratory Therapy Techniques I	8.0
RCP:320	Respiratory Therapy Science I	3.5
Term Two		
BIO:170	Human Anatomy and Physiology II	3.0
BIO:172	Human Anatomy and Physiology II Lab	1.0
RCP:460	Respiratory Science II	3.5
RCP:540	Respiratory Therapy Techniques II	8.0
*	Computer Elective	1.0-3.0
Term Three		
PSY:111	Introduction to Psychology OR	3.0
PSY:112	Psychology of Human Relations	3.0
RCP:350	Pulmonary Pathology	3.0
RCP:490	Respiratory Therapy Science III	6.0
Term Four		
BIO:183	Microbiology	3.0
BIO:184	Microbiology Lab	1.0
ENG:105	Composition I	3.0
RCP:600	Neonatal/Pediatric Respiratory Therapy	3.0
RCP:820	Respiratory Therapy Techniques IV	7.5
Term Five		
HSC:136	Advanced Life Support (ACLS/PALS)	1.5
RCP:830	Respiratory Therapy V	12.0
RCP:840	Innovations in Respiratory Care	5.5

*** Electives:**

Computer Electives: BCA:100, BCA:112, BCA:212, SDV:200

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college.

Demonstrated computer literacy is a requirement for graduation. For this program the computer literacy requirement is built into the program coursework.

SURGICAL TECHNOLOGY

The Surgical Technology program, a consortium between NICC and Kirkwood Community College (KCC), provides you the opportunity to complete your general education coursework through NICC and the Surgical Technology courses through KCC on NICC's Peosta Campus via the fiber optic network (ICN).

Surgical technologists work as members of the surgical team in a variety of settings, most frequently in the hospital operating rooms. They function under supervision to ensure that the operating room is safe, equipment functions properly, and the operative procedures are conducted under conditions that maximize safety.

When you graduate, you are eligible to take the national certification exam offered by the Liaison Council for Surgical Technologist certification. Kirkwood's Surgical Technology program is accredited by the commission on Accreditation of Allied Health Education Programs (CAAHEP) in collaboration with the American College of Technologists (AST) and based on the recommendation of the Accreditation Review Committee (ARC).

ENTRANCE REQUIREMENTS

You will complete applications for both NICC and KCC and complete a basic skills assessment. Apply to Kirkwood online at www.kirkwood.edu/Apply. You must be at least 17 years of age. Prior to beginning the program you will be required to complete a criminal record check. A positive report may prevent you from being accepted by an affiliated agency for a clinical experience and completion of the program. You may also be required to provide documentation of health insurance coverage. A completed health physical and current immunization record must be on file at the Kirkwood Health Office including verification of the hepatitis B vaccination or medical waiver on file. You are responsible for a yearly tuberculosis test. A current CPR for the Health Care Professional is also required. The following CPR certifications will be accepted: American Health Association - "Healthcare Provider" course (no other level accepted) or American Red Cross - "CPR for the Professional Rescuer" (no other level accepted) or EMP - "BLSPRO" (this course includes First Aid and Healthcare Provider CPR) or CPR Instructor Level for Red Cross, American Heart, or EMP. A copy of a high school diploma or GED certificate will need to be on file with the program coordinator.

AWARD

Diploma and/or Associate in Applied Science (AAS) granted from Kirkwood Community College.

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Surgical Technology (Diploma)

Term One		Credits
BIO:158	Basic Anatomy and Physiology	2.0
BIO:160	Basic Anatomy and Physiology Lab	1.0
BIO:200	Basic Microbiology	1.0
BIO:201	Basic Microbiology Lab	.5
HSC:117	**Basic Medical Terminology	2.5
HSC:131	Heartsaver First Aid and Health Care Provider CPR/AED	.5
HSC:135	First Aid	.5
HS110U	*Professionals in Health	2.0
HS111U	*Health Skills I	1.0
HS112U	*Health Skills II	1.0
ST101U	*Surgical Technology I	6.5

(A current *CPR for the Health Care Professional* or equivalent is required for the program.)

Term Two		
BCA:100	Computer Literacy	1.0
MAT:041	Basic Math	3.0
SPC:112	Public Speaking	3.0
ST201U	*Surgical Technology II	4.0
ST302U	*Surgical Specialties	4.0
ST303U	*Surgical Technology Pharmacology	1.0
ST821U	*Surgical Technology Clinic I	6.0

Term Three		
ST832U	*Surgical Technology Clinic II	11.0

Surgical Technology (AAS)

Associate of Applied Science degree after completing additional required courses. Awards are granted from Kirkwood Community College.

Surgical Technology Diploma plus:

MGT:102	Principles of Management	3.0
PSY:111	Introduction to Psychology	3.0
	Humanities Elective (transfer-level)	3.0
CC130T	*Fundamentals of Communications	3.0
HS156U	*Homeostatic Physiology	3.0

*Course taken through Kirkwood Community College.

**HIT:140 Medical Transcription (4 cr.) will also be accepted.

TOURISM

The tourism industry is one of the fastest growing industries. The goal of this certificate program is to expose you to the many facets of this very diversified industry and lead you to entry-level positions.

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to acceptance into the program.

AWARD

Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
BUS:180	Business Ethics	3.0
SDV:060	Time and Stress Management	1.0
*	Communication Elective	3.0
*	Computer Elective	1.5-3.0
*	Psychology Elective	3.0

Term Two		
MKT:275	Marketing Occupational Experiences I	2.0
TRV:113	Introduction to Tourism	3.0
TRV:114	Introduction to the Hospitality Industry	3.0

*Electives:

Communication Electives: COM:020, COM:723, ENG:013, ENG:021, ENG:105, SPC:112

Computer Electives: BCA:112, BCA:212, SDV:200

Psychology Electives: PSY

VITICULTURE TECHNOLOGY

The Viticulture Technology program provides a comprehensive examination of the field of viticulture (grape growing) offered through the Viticulture and Enology Science and Technology Alliance (VESTA) consortium of colleges including Northeast Iowa Community College, Missouri State University, and Shawnee (IL) Community College. The program provides the knowledge required to maintain vineyards in Iowa and the Midwest, with specific attention given to varietal selection, soil preparation, pest management, and marketing, as well as the science, agriculture, and business skills necessary to succeed in Iowa's rapidly growing viticulture business. The program is specifically designed to include field work and laboratory practicum at local vineyards.

Most of the Viticulture Technology core courses are offered online through VESTA. Students interested in the Viticulture program should become familiar with VESTA by visiting their Website at www.vesta-usa.org.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and complete a basic skills assessment prior to being accepted into the program.

AWARD

Associate in Applied Science Degree, Diploma, Certificate

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Viticulture Technology (AAS)

Suggested Course Sequence

Term One		Credits
BIO:112	General Biology I	4.0
COM:723	Workplace Communication OR	3.0
SPC:112	Public Speaking	3.0
MAT:102	Intermediate Algebra	4.0
SDV:108	The College Experience	1.0
VIN:111	**Introduction to Viticulture and Vineyard Establishment	3.0
Term Two		
AGA:142	Soils for Viticulture	3.0
BCA:212	Introduction to Computer Business Applications	3.0
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
ENG:105	Composition I	3.0
VIN:113	**Winter/Spring Viticulture Technology	3.0
Term Three		
VIN:115	**Summer/Fall Viticulture Technology	3.0
*	Technical Elective	3.0
Term Four		
AGR:157	**Principles of Agricultural Mechanization	3.0
BIO:125	Plant Biology	4.0
BUS:211	Business Statistics	4.0
PHY:106	Survey of Physics	4.0
VIN:211	**Integrated Pest Management	2.0
Term Five		
ENG:108	Composition II: Technical Writing	3.0
POL:111	American National Government	3.0
VIN:146	**Introduction to Enology	2.0
VIN:190	Viticulture Safety	1.0
VIN:213	**Midwest Vineyard Management	2.0
VIN:266	Sensory Evaluation	3.0

*Technical Electives:

ADM:116, ADM:119, ADM:132, ADM:141, ADM:148, ADM:162, ADM:175, ADM:190, ADM:199, ADM:209, ADM:265, ADM:266, ADM:267, ADM:936, BCA, BUS, CIS, CSC, ECN, FIN, GRA, LGL, MGT, MKT, NET:115, NET:134, NET:318, NET:320, NET:453, NET:481, NET:505, NET:946, TRV:113, TRV:114

** Courses completed through VESTA

Computer literacy is required as part of this major. BCA:212 will fulfill this requirement.

Viticulture Technology (Diploma)

Suggested Course Sequence

Term One		Credits
BIO:125	Plant Biology	4.0
VIN:111	**Introduction to Viticulture and Vineyard Establishment	3.0
VIN:211	**Integrated Pest Management	2.0
*	Communication Elective	3.0
*	Elective	3.0

Term Two		
AGA:142	Soils for Viticulture	3.0
CHM:110	Introduction to Chemistry	3.0
CHM:111	Introduction to Chemistry Lab	1.0
VIN:113	**Winter/Spring Viticulture Technology	3.0
VIN:190	Viticulture Safety	1.0
VIN:213	**Midwest Vineyard Management	2.0
*	Viticulture Elective	2.0

Term Three		
VIN:115	**Summer/Fall Viticulture Technology	3.0

*Electives:

Communication Electives:
COM:145, COM:155, ENG:021, ENG:105, ENG:106, ENG:221, SPC:112

Electives:
ART, ASL, BIO, CHM, CLS, COM, DRA, ECN, ENG, ENV, FLS, GEO, HIS, HUM, LIT, MAT, MUA, MUS, PHI, PHS, PHY, POL, PSY, REL, SOC, SPC; and/or Life Skills; three hours can be taken from BCA:112, BCA:212

Viticulture Electives:
VIN:146, VIN:266, VIN:270, VIN:272

** Courses completed through VESTA

Computer literacy is a requirement for graduation. For these programs the computer literacy requirement is built into the coursework.

Viticulture Technology (Certificate)

Suggested Course Sequence

Term One		Credits
BCA:212	Introduction to Computer Business Applications	3.0
VIN:111	**Introduction to Viticulture and Vineyard Establishment	3.0
VIN:211	**Integrated Pest Management	2.0

Term Two		
AGA:142	Soils for Viticulture	3.0
VIN:113	**Winter/Spring Viticulture Technology	3.0
VIN:190	Viticulture Safety	1.0
VIN:213	**Midwest Vineyard Management	2.0

Term Three		
VIN:115	**Summer/Fall Viticulture Technology	3.0

** Courses completed through VESTA

WELDING

Welding offers rewarding and challenging career opportunities both indoors and outdoors in a variety of industries ranging from repair jobs to fabrication/ construction activities. If you look around, almost everything made of metal is welded. The world's tallest buildings, airplanes, ships, race cars, home appliances, and automobiles are just a few examples.

There are many ways to make a weld and a wide variety of metals and alloys that can be welded. Welding has become complex and technical and requires a great deal of knowledge to be able to select the proper process for critical work. Excellent eye/hand coordination are attributes of highly-skilled and well-paid welders.

The demand for welders is high, and technical training provides you with improved opportunities and career progression.

ENTRANCE REQUIREMENTS

You must have the ability and interest to profit from the program and complete a basic skills assessment prior to being accepted into the program.

AWARD

Diploma

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Suggested Course Sequence

Term One		Credits
WEL:110	Welding Blueprint Reading	2.0
WEL:120	Oxyacetylene Fuel Welding and Cutting	2.0
WEL:154	Introduction to Arc Welding (SMAW)	4.0
WEL:190	Gas Tungsten Arc Welding	2.0
WEL:390	Weld Lab I	5.0
*	Math Elective	3.0
Term Two		
HSC:133	First Aid/CPR	.5
WEL:175	Advanced Arc Welding (SMAW)	2.0
WEL:186	Gas Metal Arc Welding (GMAW)	4.0
WEL:301	Pipe Welding	2.0
WEL:391	Weld Lab II	5.0
*	Communication Elective	3.0
*	Computer Elective	1.0-3.0

*** Electives:**

Communication Electives: COM:020, COM:723, ENG:013, ENG:021, ENG:105

Computer Electives: BCA:100, BCA:112, BCA:212, SDV:200

Math Electives: MAT:041, MAT:053, MAT:063, MAT:102, MAT:744, transfer-level MAT

The computer literacy requirement for this program is built into the coursework.

Course **Descriptions**

student driven...community focused

2008-2009

COURSE CLASSIFICATION SYSTEM

Each course description in this section is preceded by a course letter such as ACC:111. The first three letters are the prefix. The last three numbers are the suffix. The meaning of the number is described below. Course prefixes that are preceded by a (~) in the listing below are considered vocational-technical in nature and may be applied toward 16 of the 20 general elective credits required for an AA or AS degree.

Prefixes: The three-letter prefix identifies the area of study in which the course may be found.
Suffixes: The last three numbers identify a specific course within a subject area.

~ ACC – Accounting
~ ADM – Administrative Assisting
~ ADN – Associate Degree Nursing
~ AGA – Agriculture – Agronomy
~ AGB – Agriculture – Farm Management
~ AGC – Agriculture – Compreh., Misc.
~ AGH – Agriculture – Horticulture
~ AGM – Agriculture – Mechanics
~ AGN – Agriculture – Forestry
~ AGP – Agriculture – Precision Ag
~ AGS – Agriculture – Animal Science
ART – Art
ASL – American Sign Language
~ AUT – Automotive Technology
~ BCA – Business Computer Application
BIO – Biology
~ BUS – Business
~ CAD – Computer Aided Drafting
CHM – Chemistry
~ CIS – Computer Programming
CLS – Cultural Studies
COM – Communication
~ CON – Construction
~ COS – Cosmetology
~ CRJ – Criminal Justice
~ CSC – Computer Science
~ DEA – Dental Assistant
DRA – Film and Theatre
~ DSL – Diesel
~ ECE – Early Childhood Education
ECN – Economics
~ EDU – Education
~ EGT – Engineering Technology
~ ELE – Electrical Technology
~ ELT – Electronics
~ EMS – Emergency Medical Services
ENG – English Composition
ENV – Environmental Science
ESL – Non-intensive ESL
~ FIN – Finance
~ FIR – Fire Science
FLS – Foreign Language – Spanish
GEO – Geography
~ GRA – Graphic Communications
~ HCR – Heating and Air Conditioning
~ HEQ – Heavy Equipment
HIS – History
~ HIT – Health Information Technology
~ HSC – Health Sciences
~ HSV – Human Services
HUM – Humanities
~ IND – Industrial Technology
~ LGL – Legal Assistant
LIT – Literature
MAT – Mathematics
~ MFG – Manufacturing
~ MGT – Management
~ MKT – Marketing
~ MLT – Medical Lab Tech
~ MST – Massage Therapy
~ MTR – Medical Transcription
~ MUA – Music – Applied
MUS – General Music
~ NET – Computer Networking
~ PEC – Coaching Officiating
PHI – Philosophy
~ PHS – Physical Science
PHY – Physics
~ PNN – Practical Nursing
POL – Political Science
PSY – Psychology
~ RAD – Radiologic Technology
~ RCP – Respiratory Therapy
REL – Religion
SCI – Science
SDV – Student Development
SOC – Sociology
SPC – Speech
~ TRV – Travel and Tourism
~ UTL – Utilities
~ VIN – Viticulture
~ WEL – Welding

COURSE DESCRIPTIONS

Note: Some of the courses will be preceded by one or more asterisks (*). See explanations below:

( ) Courses not preceded by an asterisk are intended to meet specific Diploma, Associate in Applied Science Degree, and Associate Science/Career Option Degree requirements as outlined in this catalog. Sixteen semester hours from this area can be applied to Associate in Arts or Associate in Science Degree electives. Transferability varies and is dependent on the receiving institution. If you intend to transfer to a four-year institution, you should clear the transferability of such courses through the receiving institution.

(*) Courses that correspond to college or university lower division coursework. NICC recommends that colleges and universities grant subject or elective credit toward junior standing for these courses. Many of these courses may be applied toward meeting distribution and elective requirements for the Associate in Arts degree.

(**) Foundation-building (developmental) courses intended primarily to provide you an opportunity for the improvement of subject matter proficiencies in preparation for non-developmental and transfer. These courses are not considered transferable.

(***) Life Skills courses.

Please Note: NICC separates science courses into Natural and Physical Sciences as listed below, but other colleges and universities may use different breakdowns. Students transferring credits to another institution should check with that institution for information on their requirements and how these specific courses fit into those requirements.

Natural/Life Sciences: BIO:112, BIO:113, BIO:125, BIO:149, BIO:153, BIO:157, BIO:158, BIO:160, BIO:165, BIO:167, BIO:170, BIO:172, BIO:183, BIO:184, BIO:190, BIO:200, BIO:201, ENV:115, ENV:116, ENV:140, SCI:001
Physical Sciences: CHM:110, CHM:111, CHM:160, CHM:161, CHM:170, CHM:171, CHM:262, PHS:142, PHS:143, PHS:170, PHS:171, PHY:106, PHY:162, PHY:172, PHY:710

ACC: ACCOUNTING

ACC:111 Introduction to Accounting 3 Credits
A varied course of study determined by the abilities and experiences of the students. Basic principles of bookkeeping are learned in actual work-type problems. (32/32)

ACC:115 Introduction to Accounting 4 Credits
Basic accounting principles introduce beginning students to fundamental accounting concepts. The accounting cycle of journalizing transactions, posting, adjusting and closing entries, along with the preparation of financial statements are emphasized for service and merchandising concerns. The scope and depth of accounting concepts discussed are aimed at non-accounting majors. (48/32)

ACC:116 Introduction to Accounting II 4 Credits
Additional study of accounting fundamentals, including inventories, acquisition of plant assets, depreciation of plant assets, disposal of plant assets, and liabilities. (48/32) Prerequisite: ACC:115

*ACC:152 Financial Accounting 4 Credits
Introduces the concepts and terminology of accounting and financial reporting for modern business enterprises. Examines the processes for analyzing and interpreting accounting information for use in making decisions about organizations and presents the basic mechanics of accounting procedures. (48/32) Prerequisite: MAT:041 or MAT:053 or qualifying placement score. ACC:111 or ACC:115 recommended

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

*ACC:156 Managerial Accounting 4 Credits
Introduces managerial accounting within the context of business and business decisions. Explores the role of managerial accounting in the decision-making process and presents basic accounting concepts important to management decisions in the modern business environment. (48/32) Prerequisite: A minimum grade of C- in ACC:152

ACC:162 Payroll Accounting 4 Credits
The study of personnel and payroll records that provide the information required under current laws affecting the operations of a payroll system. (64/0)

*ACC:222 Cost Accounting 4 Credits
Fundamental concepts of job process provide a basic understanding of internal cost accounting systems. (48/32) Prerequisite: ACC:156

*ACC:231 Intermediate Accounting I 4 Credits
A broad overview of accounting and its theoretical foundation as well as comprehensive coverage of the asset area. Activities include preparing financial statements, completing time-value accounting applications, accounting for cash, receivables, inventory, and fixed assets. (48/32) Prerequisite: A minimum grade of C- in ACC:156

*ACC:232 Intermediate Accounting II 4 Credits
Covers asset, liabilities, and owner's equity; special problems in income determination and reporting and the cash flow statement. Activities include accounting for non-current operating assets, long-term investments in equity securities, current and contingent assets, long-term debt securities, owner's equity, income taxes, leases, and pensions. (48/32) Prerequisite: ACC:231

ACC:252 Governmental and Non-Profit Accounting 4 Credits
Application of generally accepted accounting principles for public schools, government, and nonprofit entities. (64/0) Prerequisite: ACC:156

*ACC:265 Income Tax Accounting 4 Credits
A study of federal taxation as it applies to individuals and single proprietorship businesses. (64/0) Prerequisite: ACC:115 or ACC:152

ACC:272 Accounting Information Systems 4 Credits
Intended for second year students, this course studies the flow of accounting information through accounting systems and the integration of accounting systems with their information systems. Integrates student knowledge of financial accounting and cost accounting with computerized information systems. Emphasizes analysis and design of computerized accounting information systems. (64/0) Prerequisite: A minimum grade of C- in ACC:231

ACC:285 Surviving the Audit 4 Credits
A study in auditing principles in an investigative (attest) function relating to financial statement data. This data is measured in relation to Generally Accepted Accounting Principles (GAAP). Auditing is the practice determining whether the information presented in accounting reports fairly represents the company's financial condition. (64/0) Prerequisite: ACC:231

*ACC:311 Computer Accounting 3 Credits
A realistic approach to using a computerized, fully integrated accounting system consisting of the following modules: general ledger, accounts receivable and payable, inventory, depreciation, payroll systems, and financial statement analysis. An accounting system is set up to record those events disclosed by the creation or receipt of source documents. (16/64) Prerequisite: ACC:152

ACC:480 Advanced Accounting Applications 3 Credits
A study of selected advanced problem areas in accounting applications including, but not limited to, using accounting data in the decision making process and establishing and maintaining a computerized accounting system. Accounting concepts will be applied to real-world situations of business delivering services to clients using accounting software. (32/32) Prerequisite: ACC:231

ACC:804 Accounting Spreadsheet Applications 3 Credits
A realistic approach to using a computerized, integrated accounting system consisting of modules commonly found in a computerized accounting environment: general ledger, accounts receivable and payable, inventory, depreciation, payroll systems, and financial statement analysis. Includes a study and use of spreadsheet software to enable students to use the tool to solve accounting and business analysis problems. (0/96) Prerequisite: ACC:115 or ACC:152

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

ADM: ADMINISTRATIVE ASSISTING

***ADM:106 Introduction to Keyboarding 2 Credits
Introduces basic techniques of keyboarding, including keyboarding skills, development of speed and accuracy, and the ability to create basic business documents. (16/32)

ADM:116 Keyboarding II 3 Credits
Review of proper keyboarding techniques with emphasis placed on speed and accuracy development. Practical applications in producing business forms, interoffice correspondence, letters, manuscripts, and tabulations. (16/64) Prerequisite: ADM:106 or 25 nwpm

ADM:119 Keyboarding III 3 Credits
Additional practical problem solving in business forms, interoffice correspondence, legal forms, letters, reports, tables, and other miscellaneous business applications. Further improvement is expected in areas of increased production, end-product quality, and increased speed and accuracy. (16/64) Prerequisite: ADM:116

ADM:132 Business Math and Calculators 2 Credits
Electronic calculator operations with an emphasis on speed and accuracy. Addresses addition, subtraction, multiplication, and division as well as the use of constants, chain computations, and prorations. (32/0)

ADM:141 Desktop Publishing 2 Credits
Teaches the concepts of desktop publishing. Provides hands-on experience in the production and design of documents and graphics using desktop publishing software. (16/32) Prerequisite: ADM:116 or instructor approval

ADM:148 Transcription 2 Credits
Instruction for using transcription machines with emphasis on language skills including spelling, capitalization, punctuation, and word usage. Covers the full range of machine transcription activities—progressing from simple transcribing exercises to difficult office-style transcription requiring decision-making ability. (16/32) Prerequisite: ADM:116

ADM:162 Office Procedures 3 Credits
Studies office procedures and administrative office management. Topics include work environment, workplace technologies, customer and employee satisfaction, mail, travel, meetings, conferences, and your career. (48/0)

ADM:175 Records and Database Management 2 Credits
Integrates the rules of filing with state-of-the-art information on the management of records. Emphasizes the latest ideas in manual paper systems as well as the interface of records management with computer database systems. Introduces computerized storage and retrieval. (32/0)

ADM:190 Billing for the Medical Office 2 Credits
Overview of administrative sequence involved in processing of insurance claims for a medical office setting. Includes the importance of collecting patient information, insurance verification, encounter form collection, coding, linkage and compliance, provider reimbursement, claims preparation and transmission, and reimbursement follow-up. (32/0) Prerequisites: HIT:140, HIT:320, HIT:330

ADM:199 Legal Studies: Terminology and Transcription 4 Credits
Studies legal terminology as the language of law and includes spelling, pronunciation, usage, and instruction in the use of transcription machines requiring decision-making ability. Emphasizes high proficiency in language skills and full-scale knowledge and use of specific legal terminology. Covers legal terminology, law office transcription, and document processing. (48/32) Prerequisite(s): ADM:116. ADM:119 required for Office Technology-Legal option

ADM:265 Supervised Practical Experience 2 Credits
Occupational experience in a simulated office setting to provide practical experience in the execution of office skills and concepts necessary for successful employment. This involves computer use in the completion of simulated office applications. Upon completion of ADM:265, students continue on in a one-credit module specific to their chosen emphasis: ADM:266 Module General Emphasis, ADM:267 Module Medical Secretary Emphasis. (16/32) Prerequisites: ADM:116, ADM:162, BCA:212

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

ADM:266 Supervised Practical Experience - Module General Emphasis 1 Credit
Occupational experience in a simulated office setting provides practical experience in the execution of office skills and concepts necessary for successful employment. This involves computer use in the completion of simulated office applications. (0/32) Prerequisite: ADM:265

ADM:267 Supervised Practical Experience - Module Medical Secretary Emphasis 1 Credit
Occupational experience in a simulated office setting provides practical experience in the execution of office skills and concepts necessary for successful employment. This involves computer use for the completion of simulated office applications. (0/32) Prerequisite: ADM:265

ADM:936 Occupational Experience 4 Credits
Opportunity for supervised work experience related to the major academic interests of students in an approved business establishment. Skills and knowledge are applied by working a minimum of 256 hours to receive credit. (256 co-op hours) Prerequisite: Minimum employable skills/instructor approval

ADN: Associate Degree Nursing

ADN:146 Transition from Practice into Associate Degree Nursing 2.25 Credits
Facilitates transition of the Licensed Practical Nurse who is returning to school to enter the Associate Degree level of NE Iowa nursing program. Reviews practical nursing knowledge in areas of nursing process, care planning, physical assessment, test taking, and lab skills. Includes orientation to the program requirements, policies and procedures, and college resources. (32/8) Prerequisite: Students must be accepted for ADN advanced placement in the nursing program by the Dean of Nursing

ADN:148 Transition to Associate Degree Nursing 4 Credits
Focuses on content specific to registered nursing. Explores nursing roles including educator, leader, provider, and manager of care. Reviews critical thinking, legal and ethical responsibilities. Addresses in theory and in the lab setting the application of the nursing process, physical assessment, and administration of IV medications. Presents nursing care of the oncological client, including pathophysiology, treatment, and complications of cancer. (52/24) Prerequisite: PNN:529 or completion of Practical Nurse Program at another school

ADN:434 Comprehensive Nursing Care of the Childbearing Family 4 Credits
Focuses on the normal aspects of maternal, newborn, and women's health. Explores complications that may occur during pregnancy, childbirth, in the newborn, and in the gynecologic health of women throughout the life span. The nurse's role as educator, patient advocate, and care provider are reflected in the application of the nursing process to a variety of clinical and laboratory experiences. Areas of clinical practices may include acute care (hospital), prenatal care office settings, public health clinics, home follow-up care, and educational settings. Application of principles in pharmacology, nutrition, social sciences, and biophysical science are correlated throughout the course. (32/24 and 60 clinical hours) Prerequisites: A minimum grade of C- in ADN:148

ADN:444 Comprehensive Nursing Care of Children 4 Credits
Includes assisting children and their families in achieving maximum health potential. Stresses the effects of illnesses and deviations from the normal upon the child, family, and the community. Clinical experiences is planned to include caring for healthy as well as acutely and chronically ill children and their families. (32/16 and 72 clinical hours) Prerequisites: A minimum grade of C- in ADN:148

ADN:475 Comprehensive Nursing Care of the Mental Health Client 6 Credits
Emphasis is given to increased self-knowledge for the understanding of "normal" versus deviant behavior and the dynamics of human behavior. Bases therapeutic responses and interaction with clients on behavior manifested rather than on classified diagnosis. Concepts examined include the therapeutic milieu, conceptual

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models of psychiatric treatment, treatment modalities, psychiatric/mental health nurse's role and function within the continuum of care (health promotion, maintenance, acute and crisis), and therapeutic communication. (72/0 and 72 clinical hours) Prerequisites: A minimum grade of C- in ADN:148, PSY:111

ADN:526 Comprehensive Nursing Care of Adults 12 Credits
Comprehensive study of adult clients to build nursing knowledge of disease pathophysiology and the application of the nursing process. The clinical component builds on classroom experiences, allows students to implement their knowledge in specialized areas, and assists in development of nursing roles as providers and managers of care and members of the nursing discipline in the transition from student to entry-level practitioner. (120/16 and 192 clinical hours) Prerequisites must be passed with a minimum grade of C-. Prerequisites: ADN:434, ADN:444, ADN:475. Must have successfully passed NCLEX LPN boards. Pre-/corequisites: BIO:183, BIO:184, SOC:110

AGA: Agriculture - Agronomy

AGA:014 Crop Science 3 Credits
Course is designed for high school seniors and college freshmen as an overview of crop management. It introduces the principles of plant-soil-climate relationships (40/16)

*AGA:114 Principles of Agronomy 3 Credits
Introductory principles of plant-soil-climate relationships in crop production designed after a similar course at Iowa State University and uses many of the same materials. (36/24)

AGA:140 Transitional Soils for Viticulture 1 Credit
Explores soil properties and behavior as they relate to growing grapes for fine wines. (16/0) Prerequisite: AGA:153

AGA:142 Soils for Viticulture 3 Credits
Explores soil properties and behavior and their influence on wines. Focuses not only on growth and production but on the long-term effects of viticulture on soil quality and the wider environment. (40/16)

AGA:153 Fundamentals of Soil Science 2 Credits
Introduction to physical, chemical, and biological properties of soils, their formation, classification, and distribution. Uses soil survey and land information to balance agronomic, economic, and environmental concerns in soil management. (32/16)

AGA:154 Fundamentals of Soil Science 3 Credits
Introduction to physical, chemical, and biological properties of soils, their formation, classification, and distribution. Uses soil survey and land information to balance agronomic, economic, and environmental concerns in soil management. (40/16)

AGA:157 Soil Fertility 1 Credit
Provides a working knowledge of agronomic terms, soil-plant relationships, and principles of fertilizer use and lime use. (12/8)

AGA:161 Herbicides 1 Credit
Familiarizes students with the herbicides used in Midwest crops, their families, mode of action, and injury symptoms. (12/8)

*AGA:212 Grain and Forage Crops 4 Credits
Includes the study of production of feed grains, oilseeds, and forages common to the area. Management practices studied range from the selection of varieties to the harvesting of the final crop. Consideration is given to established as well as new production practices. Course articulates with Iowa State University as AGRON212. (48/32)

AGA:283 Pesticide Application Certification 2 Credits
Application equipment will be analyzed and emphasis given to proper calibration, safety, proper application, and qualifying conditions. Utilization of spraying systems guidebooks will be stressed. Students will be required to pass the Certified Pesticide Applicator License core exam. Course will show how to prepare equipment for the season and how to maintain it for error-free operation. (20/24)

AGA:333 Forage Production 1 Credit
The principles of forage production with emphasis on selection, seeding, fertility, weed and pest control, tillage practices, harvesting, storage, and the successful management of annual and perennial forages. (16/0)

Key:
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****Life Skills courses*

AGA:374 Pest Identification 1 Credit
Familiarizes students with the major crop pests (weeds, insects, and diseases) and their identifying characteristics. (12/8)

AGA:375 Integrated Crop Management 2 Credits
Students learn how to put together a total management package that seeks to maximize profitability while taking environmental impacts into account. Critical resources for ICM include the soil, the producer's equipment and capital, and the management resources of the producer. Students develop a farm map using GPS and GIS resources. (16/32) Prerequisite: PHS:193

AGA:853 Certified Crop Advisor Review 1 Credit
Reviews the competencies required for the national and state certified crop advisor exams. (16/0)

AGB: Agriculture – Farm Management

AGB:030 Farm Management 3 Credits
Designed for high school seniors and college freshmen as an overview of the farm management process and the process of farm decision making. Includes record keeping, budgeting, year-end analysis, enterprise analysis, and tax management. (40/16)

AGB:035 Agriculture Risk Management 2 Credits
Addresses price risk as a management versus a marketing function. Price risks impact not only the marketing of a product but the cash flow and overall finacial health of the business. Use of derivatives need to be viewed as tools that can be used to control price risk. Each derivative and subsequent combination is examined. Price forecasting is addressed as well as fundamentals of futures and options hedging. (32/0) Prerequisite: AGB:235

AGB:131 Introduction to Ag Business 1 Credit
Introduces the skills needed to be an effective manager of an agribusiness today. Learn marketing, office procedures, careers, personnel, inventory, and credit management. (16/0)

AGB:150 Crop Enterprise Records 1 Credit
Explains the important ingredients of a good crop enterprise record system. As part of the course, students will be required to input data into a computerized crop enterprise record system. (8/16) Prerequisite: SDV:200 or instructor approval

*AGB:235 Introduction to Agriculture Markets 3 Credits
An overview to the agriculture markets and marketing systems and how these are evolving in a rapidly changing global market. Students learn how to analyze markets and pricing alternatives and how to use the futures markets to lock-in or improve profits. Includes the study of farm-level price behavior, pricing systems and marketing management, technical analysis, and use of other market information. (40/16)

*AGB:330 Farm Business Management 3 Credits
Covers all aspects of farm decision making, including record keeping, budgeting, year-end analysis, enterprise analysis, and tax management. (48/0)

AGB:333 Applied Farm Financial Management 2 Credits
Gives the successful student experience with the financial records needed to manage a farm business. (16/32)

*AGB:336 Agricultural Selling 3 Credits
Covers agriculture sales related to marketing/selling strategies, preparing for sales calls and presentations, handling objections, closing sales, analysis of purchasing process, and evaluating agri-selling as a possible career choice. Students will spend one day with an ag salesperson. (32/32)

AGB:436 Grain Merchandising 2 Credits
Explains the function of the country elevator in the agriculture industry. How basis trading presents an opportunity for the elevator to manage risk and improve margins on the grain commodities it handles. Covers the day-to-day tasks that make a merchandising operation run smoothly as well as how a country elevator can help producers improve profit levels and limit risk. (24/16) Prerequisite: AGB:235

AGB:466 Agricultural Finance 3 Credits
Financial analysis of agricultural operations; liquidity, capital structure, and growth of agricultural firms; risk and return; capital budgeting methods; analysis of land

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investments, leasing, and costs of credit; financial intermediation and major financial institutions for agriculture; credit scoring, loan pricing, and asset-liability management techniques by financial intermediaries; public policies affecting agricultural credit markets. (48/0) Prerequisites: ACC:111 or ACC:152 or AGB:330

AGB:802 Agribusiness Internship I 2 Credits
Students are placed on-the-job in agribusiness firms which most nearly fit their career goals with the purpose of giving experiences and developing skills and knowledge which cannot be furnished in the classroom. (128 co-op hours)

AGB:812 Agribusiness Internship II 2 Credits
Students are placed on-the-job in agribusiness firms which most nearly fit their career goals with the purpose of giving experiences and developing skills and knowledge which cannot be furnished in the classroom. (128 co-op hours)

AGB:822 Agribusiness Internship III 2 Credits
Students are placed on-the-job in agribusiness firms which most nearly fit their career goals with the purpose of giving experiences and developing skills and knowledge which cannot be furnished in the classroom. (128 co-op hours)

AGB:930 Agriculture Seminar 1 Credit
Students will take a trip within the Midwest to view various aspects of agribusiness today. Areas studied are careers, marketing, customer relations, planning and organizing, and management responsibilities. (0/32) Prerequisite: Completion of one semester of Agriculture Sales and Service or Agriculture Management program

AGC: Agriculture – Comprehensive - Miscellaneous

AGC:108 Agriculture Computer Spreadsheets 1 Credit
Students will develop spreadsheets for use in agriculture management. Management areas covered include: break-even analysis, ag marketing, machinery management, cash flow analysis, crop management, and livestock management. (8/16) Prerequisite: SDV:200 or instructor approval

AGC:121 Introduction to Agriculture I 3 Credits
Addresses basic levels of modern Agriscience concepts using language and examples designed to meet the needs of beginning students interested in natural science careers. Integrates broadened principles of agriculture through all the major science areas and adds many new applications of science, technology, math, agriculture, natural resources, and the environment. (32/32)

AGC:122 Introduction to Agriculture II 3 Credits
A continuation of Intro. to Ag I, and explores more in-depth topics of crop science, ornamental use of plants, animal sciences, food sciences and technology, and communications and management in Agriscience. (32/32) Prerequisite: AGC:121

AGC:802 Agriculture Production Internship I 2 Credits
An opportunity to further develop and practice farm management skills based on objectives set forth in an individual training plan developed with and for each student. An economical, well-managed farm or farm enterprise of appropriate size serves as the training site. (128 co-op hours)

AGC:812 Agriculture Production Internship II 2 Credits
An opportunity to further develop and practice farm management skills based on objectives set forth in an individual training plan developed with and for each student. An economical, well-managed farm or farm enterprise of appropriate size serves as the training site. (128 co-op hours)

AGC:925 Agriculture Special Projects I 2 Credits
The advanced agriculture student will be assigned a project in the teaching laboratory and will collect, organize, analyze, and present data through written and oral presentations. (0/64) Prerequisite: Second-year agriculture student status

AGC:926 Agriculture Special Projects II 2 Credits
The advanced agriculture student will be assigned a project in the teaching laboratory. Students will collect, organize, analyze, and present data through written and

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oral presentations. (0/64) Prerequisite: Second-year agriculture student status, AGC:925

AGH: Agriculture - Horticulture

AGH:239 Introduction to Arboriculture and Ornamental Horticulture 4 Credits
The general principles of arboriculture and horticulture with an emphasis on the utilization and cultural characteristics of commonly cultivated woody and herbaceous plants. Special consideration given to the relationships between humans and landscape plants and to employment opportunities. (48/32)

AGH:290 Nursery and Landscape Maintenance 3 Credits
General principles of landscape and nursery maintenance with an emphasis on utilization and cultural characteristics of commonly cultivated landscape plants and the use and installation of hardscape features. Special consideration given to employment opportunities and preparation for the Iowa Certified Nursery Professional examination. (32/32)

AGM: Agriculture - Mechanics

AGM:105 Introduction to Mobile Equipment Electrical Systems 2 Credits
Covers the basic electrical system as found on modern farm equipment. Course begins with the theory of electron flow, Ohms law, conductors, semi-conductors, and continues through wiring, connectors, diagrams and problem diagnosis. (32/0)

AGM:106 Principles of Electrical Systems 6 Credits
Covers the basic electrical system as found on modern farm equipment. It begins with the theory of electron flow, Ohms law, conductors, semi conductors, and continues through batteries, wiring, charging systems, and systems. (80/32)

AGM:108 Consumer Products 3 Credits
A study of both two- and four-cycle engines to gain greater understanding of test and repair procedures for engines found on compact equipment. (32/48)

AGM:109 Engine Tuneup/ Multi-Cylinder Theory 3 Credits
The study of the design and principles of operation of multiple cylinder engines as found on modern farm equipment. Includes basic engine maintenance and tuneup procedures as well as parts identification and performance evaluation. (32/48)

AGM:112 Skid Steer Loader Operation and Maintenance .5 Credit
Teaches skid steer loader inspection, operation, and safety. Discusses normal service of the skid steer loader. (7/2)

AGM:114 Hydraulics I 2 Credits
The study of fluid power includes liquids and gases and the historical development of fluid power laws and fundamental circuits. (32/0)

AGM:118 Painting 1 Credit
Instruction in straightening and repairing sheet metal, cleaning the unit, preparing the unit for painting, spray painting fundamentals, safety, and final detailing of the unit. (4/24)

AGM:123 Introduction to Mechanical Fundamentals 5.5 Credits
Studies safety and its importance to success in school and on the job, as well as the various tools, shop equipment, and machines used at a farm equipment dealership. Students will assemble and prepare for the field machines from dealers as they become available. They will also disassemble tractors or other machines to study basic design as well as to become familiar with common shop procedures and the proper and safe usage of the tools, shop equipment, and manuals involved. (46/126)

AGM:127 Custom Application Equipment 1 Credit
As custom applicators are the final link in the sales process, it is important they become involved in their job and increase their knowledge and experience as the farmer expects timely, error-free application. Includes how to prepare equipment for the season and how to maintain it for error-free operation. (8/16)

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AGM:148 Introduction to Microprocessor Controlled Components 1.5 Credits
Introduction to some of the modern farm tractor components that are microprocessor controlled, including instrument panels, hitches, and power trains. Topics include theory of operation, programming, calibration, and diagnostics on various makes and models. Lecture stresses the general theory of how these systems operate, while lab time provides opportunity to program, calibrate, and diagnose these systems on as wide a variety of models as are available. (8/28) Prerequisite: AGM:106

AGM:225 Hydraulics II 5 Credits
Instruction on the theory of operation of pumps, control valves and actuators, operational tests using the OTC flow rater, and repair of hydraulic components in the shop. (48/64)

AGM:361 Commercial Grain Handling 1 Credit
Provides a basic understanding and knowledge of physical grain handling in an agribusiness firm. Builds skills needed to succeed in the grain industry such as buying and selling, record keeping, warehousing, grain grading and management, blending, drying, and safety. (12/8)

AGM:407 Agriculture Power Transfer Systems 6 Credits
Covers power trains as used in the frame equipment industry. The first half studies basics common to all drive trains including tires and tracks, bearing and gear adjustments, methods of shifting, power flows, clutches, brakes, differentials, final drives, power takeoffs, and mechanical front-wheel drives. The second half focuses on various power shift transmissions, both countershaft and planetary types, and their controls. (70/70) Prerequisite: AGM:123

AGM:410 Engine Principles and Overhaul Procedures 10 Credits
The basic principles of both gas and diesel engines and the operation of the major engine systems. Covers overhaul procedures of the entire engine from diagnostics to completion and break-in using actual projects whenever possible. (110/165) Prerequisite: AGM:109

AGM:412 Diesel Systems 7 Credits
Covers testing and repair of diesel systems including turbochargers, combustion chambers, fuel filters, injectors, mechanical injection pumps, and electronic fuel injection. (72/80)

AGM:415 Farm Equipment Air Conditioning 3 Credits
Instruction in physical laws, air conditioning theory of operation, trouble shooting, repair, and service. (32/32) Prerequisites: AGM:106, AGM:114, AGM:123

AGM:416 Combine and Implement Repair and Adjustment 4 Credits
Instruction is given in the theory of operation, adjustment, calibration, troubleshooting, and repair of combines and other farm implements. (40/48) Prerequisites: AGM:106, AGM:114, AGM:123

AGM:418 Advanced Equipment Repair 6 Credits
The use of test equipment for diagnosing problems in engines, power trains, and fluid power systems. Emphasizes demonstrations and performance of repair and adjustment operations. Fluid power, electro-hydraulic, machine adjustment, and calibration are discussed and practiced. (48/120)

AGM:500 John Deere Implement 3 Credits
Designed to give a better understanding of basic operating principles of select John Deere implements. Theoretical operation of planters and balers is studied, as well as basic information on belts, chains, bearings, and seals. Opportunity for hands-on testing of monitors and adjustments of planters and round balers and field preparation of planters and round balers. (32/32)

AGM:501 John Deere Fundamentals and Safety 3 Credits
Entry-level course covering basic aspects of the shop, shop safety, equipment, and tools. Introduces Technical Manuals, Service Advisor, PM Pro and acronyms. Work is done with new machine predelivery, wheel moves, forklift, and machine operation and machine disassemble. (36/36)

AGM:504 John Deere Welding 1 Credit
Theory and practice of oxyacetylene welding and cutting, including proper operation of equipment. Includes the principles, safety, procedures, and application of arc and gas-metal arc welding. (0/24)

AGM:508 John Deere Combines 4 Credits
Gives a better understanding of the basic operating principles of the John Deere combine. Various combine drives are covered in a classroom setting with hands-on-training of these drives done in a lab setting. Combine adjustment is practiced on a computer simulator program. (40/40)

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AGM:510 John Deere Hydraulics I 3 Credits
Covers principles and applications of theory and fluid power as it applies to John Deere combines and other implements. Testing and diagnostic work is applied to the combine. (40/48)

AGM:511 John Deere Hydraulics II 2 Credits
Covers principles and application of fluid power as it applies to the row crop, four-wheel drive, and utility John Deere tractor. Students gain an understanding of the circuits used and how to test and diagnose them in John Deere tractors. Technical manuals and test gauge work is done as well as flow-rater application. (32/32)
Prerequisite: AGM:510

AGM:512 John Deere Hydraulics II 3 Credits
Covers principles and application of fluid power as it applies to John Deere equipment. Students gain an understanding of the circuits used and how to test and diagnose them on John Deere equipment. Service Advisor, gauges, and flow-rators will be used (36/36)
Prerequisite: AGM:510

AGM:513 John Deere Electrical/ Electronics I 3 Credits
Study of the basic electrical principles and applications of Ohm's Law, magnetism, electromagnetism, the safe utilization of electrical test meters, the design, construction, and safe testing of lead acid storage batteries, the principles of lighting systems, and combine monitoring systems. (40/48)

AGM:514 John Deere Electrical/ Electronics II 3 Credits
Covers the principles of operation, testing, and repair of ignition systems, cranking systems, charging systems, procedures and use of digital multimeters, techniques of circuit diagnosis, and reading of electrical schematics. Students will test tractor circuits including lighting, accessory, safety instrumentation, and gauges. Includes electronic monitoring systems for equipment. (40/48)
Prerequisite: AGM:513

AGM:516 John Deere Heating and Air Conditioning 2 Credits
Theory of operation and repair of late model John Deere air conditioning, heating and ventilation systems. Equipment for refrigerant recovery/recycling of R12 and R134A is used. Upon course completion students will be able to be certified for A/C service. (24/32)

AGM:518 John Deere Power Train 5 Credits
Theory of power transmission from engine to traction wheels. Includes the function and operation of gears, chains, clutches, planetary gears, drive lines, and differentials. Reassembly of John Deere clutches, two-speed planetaries differentials, final drives, mechanical front-wheel drive, and power takeoffs will occur. Covers the diagnostic repair and adjustment of John Deere syncro-range, quad-range, and power-shift transmissions. (48/72)

AGM:520 John Deere Consumer Products/Engines 3 Credits
Covers John Deere lawn, lawn and garden tractors, equipment, and attachments. Operation, diagnosis, repair, and adjustments of complete equipment are explained and practiced. Setup and adjustment of tractors, equipment, and attachments are made on actual units. (40/48)

AGM:522 John Deere Diesel Engines 3 Credits
Studies repair of the John Deere diesel engine. Discusses operation and service of the primary parts. Opportunity is given to disassemble, measure, and inspect an actual John Deere diesel engine. After the inspection, the engine is reassembled and then started to assure student competence. (40/48)

AGM:524 John Deere Diesel and Fuel Systems/Tractor Performance 3 Credits
Familiarization with the fuel injection pumps used on John Deere engines. Time is spent on awareness of maintenance procedures for proper removal, installation, and timing of fuel injection pumps, and also testing and repair of nozzle components and filtering systems. Includes dynamometer operation related to engine performance. (40/48)

AGM:530 John Deere Information Technology 4 Credits
Information resources to assist technicians during their daily job operations. Service Advisor is a computer-based software providing technical information for current and non-current John Deere equipment models. PmPro is the John Deere parts system software technicians are required to use daily. Pathways is a Website for additional information resources and continuation of dealership employee education. Course prepares students for the John Deere Service Advisor Certification test. (48/32)

Key:
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AGM:801 John Deere Internship I 11 Credits
On-the-job experience in a John Deere dealership allows students to practice and utilize skills and knowledge learned in previous semesters. The NICC John Deere Ag Tech instructor will supervise the work experience. (32/0 and 576 co-op hours)

AGM:802 John Deere Internship II 11 Credits
On-the-job experience in a John Deere dealership allows students to practice and utilize the skills and knowledge learned in previous semesters. The NICC John Deere Ag Tech instructor supervises the work experience. (32/0 and 576 co-op hours)

AGM:803 Agriculture Equipment Internship I 4 Credits
Students work in a farm equipment dealership under the supervision of the owner or shop foreman and NICC instructor. Experience is gained in several areas of the business to gain a broad view of the retail farm equipment business. (256 co-op hours) Prerequisites: AGM:106, AGM:109, AGM:114, AGM:123, AGM:407, WEL:329

AGM:804 Agriculture Equipment Internship II 4 Credits
Students work in a farm equipment dealership under the supervision of the owner or shop foreman and NICC instructor. Experience is gained in several areas of the business to gain a broad view of the retail farm equipment business. (256 co-op hours) Prerequisites: AGM:106, AGM:109, AGM:114, AGM:118, AGM:123, AGM:407, AGM:410, AGM:415, AGM:416, WEL:329

AGN: Agriculture - Forestry

AGN:135 Urban and Rural Forest Management 4 Credits
The general principles of management of community forests, residential trees, rural woodlots, native forests, and special tree populations. Special consideration given to caring for public woodlands, urban forests, and commercial tree stands. (48/32)

AGN:136 Tree Physiology, Pest, Abiotic Disorders and Treatments 4 Credits
General principles of tree physiology and tree health care management. Special consideration given to tree structure and function, environmental requirements, and hazard recognition. (48/32)

AGN:137 Tree Identification and Selection 4 Credits
General principles of identification and classification of tree species, varieties, and cultivars with an emphasis on growth characteristics, hardiness, and adaptability. Special consideration is given to selection of healthy and vigorous stock and planting site factors. (48/32)

AGN:138 Tree Establishment, Maintenance, and Removal 4 Credits
General practices associated with the establishment, maintenance, and removal of trees with an emphasis on safety procedures required for working in large, mature specimens. Special consideration given to practicing the skills and techniques commonly used by arborists. (48/32)

AGN:139 Introduction to Basic Tree Climbing 4 Credits
The basic principles and practices associated with arboriculture tree climbing activities with an emphasis on safety procedures required for working on large, mature specimens. Special consideration given to practicing the skills and systems commonly used by arborists. (48/32)

AGN:230 Introduction to Outdoor Recreation 4 Credits
Basic principles and systems associated with a variety of muscle-powered outdoor recreation activities with an emphasis on utilization of the landscapes and outdoor resources indigenous to the upper Midwest. Special consideration given to practicing skills commonly used in a variety of outdoor recreation outings. (48/32)

AGN:804 Arboriculture Internship I 4.5 Credits
A supervised occupational training experience with an emphasis on application of arboricultural principles to professional tree management operations. (288 co-op hours)

AGN:814 Arboriculture Internship II 4.5 Credits
A supervised occupational training experience with an emphasis on application of arboricultural principles to professional tree management operations. (288 co-op hours)

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****Life Skills courses*

AGP: Agriculture – Precision Agriculture

AGP:327 Global Positioning Systems and PDA's 1 Credit
Explores concepts of using Global Position System receivers with Personal Data Assist palm computers. ArcPad® software will be used as a training tool. Areas covered include history and mechanics of GPS, applications, using a receiver, and post-processing of data. (8/16)

AGP:332 GPS Crop Scouting 2 Credits
Training in the proper procedures for scouting corn, soybean, and alfalfa crops. Much of the class work involves actual crop observation, analysis, and problem solving. Backpack-style DGPS units are used in actual scouting situations. Students collect field boundaries and identify problem areas within the field with their DGPS units. (16/32)

AGP:333 Precision Farming Systems 3 Credits
Explores the concepts of Site Specific Agriculture (Precision Farming) and how it can improve profitability in a total crop management system. Students will use a basic GIS program to analyze data from a farm operation. (32/32)

AGP:421 Applications of Geographical Information Systems 2 Credits
Advanced concepts in GIS and hands-on experience in practical applications. Students will enroll in selected GIS short courses online and will be required to design a GIS project from scratch. Students set up the parameters for the project, collect the data, and format the final project which should relate to their career field. (20/24) Prerequisite: PHS:191

AGS: Agriculture – Animal Science

AGS:014 Animal Science 3 Credits
Designed for high school seniors and college freshmen as an overview of the animal science industry. Explores breeds, basic management, and farm animal marketing. Topics include beef and dairy cattle, companion animals, horses, poultry, sheep, and swine. (40/16)

*AGS:101 Working with Animals 2 Credits
Taught in conjunction with Survey of the Animal Industry. The intent is to give students practical experience working with animals. (16/32)

*AGS:113 Survey of the Animal Industry 3 Credits
Explores breeds, basic management, and marketing of farm animals. Includes topics on beef and dairy cattle, companion animals, horses, poultry, sheep, and swine. (32/32)

*AGS:114 Survey of the Animal Industry 2 Credits
Explores breeds, basic management, and marketing of farm animals. Includes topics on beef and dairy cattle, companion animals, horses, poultry, sheep, and swine. (32/0)

AGS:125 Bovine Hoof Care 3 Credits
Covers all aspects of hoof care, treatment, and maintenance. Students will utilize hoof care equipment and hooves for the training. (44/8)

*AGS:216 Equine Science 3 Credits
Designed to increase knowledge of horses and basics of the horse industry. (48/0)

*AGS:218 Domestic Animal Physiology 4 Credits
Covers the basics in animal anatomy and physiology with a concentration on farm and domestic animals. The lab section will parallel topics covered in the lecture. (48/32)

*AGS:224 Companion Animal Science 3 Credits
Covers the basic management principles relevant in the care of dogs, cats, rabbits, and other small companion animals. (48/0) Prerequisite: AGS:113

AGS:225 Swine Science 3 Credits
Skill development in swine management from breeding through marketing. Discusses health, nutrition, environmental control and ability to identify superior producing animals for breeding under various conditions. Familiarization with the pork quality assurance program and good husbandry techniques. (32/32)

Key:
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AGS:226 Beef Cattle Science 3 Credits
An overview of the beef cattle industry in the United States. Discusses management of seedstock, cow-calf, stocker, and feedlot operations. (48/0)

AGS:229 Sheep Science 3 Credits
An overview of the sheep industry in the United States. Management of range and farm flock operations is discussed. (48/0)

AGS:240 Animal Health 2 Credits
An introductory-level course providing an understanding of the principles of animal health. Emphasizes the nature of disease, nutrition, sanitation, vaccination, the basic symptoms of the animal body, diseases, parasites, and basic husbandry practices. (16/32)

AGS:242 Animal Health 3 Credits
An introductory-level course providing an understanding of the principles of animal health. Emphasizes the nature of disease, nutrition, sanitation, vaccination, the basic symptoms of the animal body, diseases, parasites, and basic husbandry practices. (48/0)

AGS:244 Applied Animal Disease Prevention and Treatment 2 Credits
This practical course applies the concepts from its companion course, Animal Health. (16/32)

*AGS:250 Food Animal Production 3 Credits
Includes discussion on all management areas involved in the production of meat, milk, wool, and eggs. (48/0) Prerequisite: AGS:113

AGS:300 Livestock Evaluation 1 Credit
Helps develop skills in proper selection of animals for breeding and production. Animals are evaluated on physical composition as well as production traits. Species studied include beef and sheep, with an emphasis placed on swine. (0/32)

AGS:305 Livestock Evaluation 3 Credits
Develops skills in proper selection of animals for breeding and production. Animals are evaluated on physical composition as well as production traits. Species will include swine, beef, and sheep, with an emphasis placed on swine. (32/32)

*AGS:319 Animal Nutrition 3 Credits
Introduces the basics of animal nutrition with emphasis on the digestive systems, terminology, feed analysis, processing, nutritional requirements, as well as ration balancing for beef, dairy, swine, and sheep. Included is an introduction to animal health and products for the same classes of livestock. (48/0)

*AGS:321 Animal Nutrition 4 Credits
Introduces the basics of animal nutrition with emphasis on the digestive systems, terminology, feed analysis, processing, nutritional requirements, as well as ration balancing for beef, dairy, swine, and sheep. Included is an introduction to animal health and products for the same classes of livestock. (64/0)

AGS:325 Dairy Nutrition 3 Credits
An introduction to the basics of dairy nutrition covering digestive systems, nutritional requirements, feed analysis, terminology, and ration balancing for dairy. (40/16)

AGS:326 Applied Ration Balancing and Feeding 2 Credits
A course to help students learn to calculate dairy cattle rations by hand and with a computer. (16/32)

AGS:328 Parlor Management 1 Credit
Trains students in the fundamentals of milking procedures and parlor management. (16/0)

AGS:329 Dairy Cattle Management 3 Credits
The management of the dairy farm with special emphasis on raising calves. (32/32)

AGS:331 Animal Reproduction 3 Credits
Increases understanding of animal genetics, breeding systems, and male and female reproductive organs. Breeding information analysis, heat detection, and keeping reproduction records are skills covered in this course. (48/0)

AGS:332 Dairy: Herd Management Lab I 2 Credits
Students work on the campus dairy farm for a selected number of days and learn approved practices in milking and management of cattle. (0/64)

AGS:333 Dairy: Herd Management Lab II 2 Credits
Students further develop their learned approved practices in milking and management of cattle. Their input is encouraged to improve management of the dairy. (0/64)

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

AGS:334 Applied Reproductive Techniques 2 Credits
Designed for skill in artificial insemination, palpation, ultrasound, and embryo transfer. (16/32)

*AGS:335 Principles of Milk Production 3 Credits
An introductory overview of the dairy industry and dairy science. (32/32)

*AGS:336 Dairy Evaluation 2 Credits
Covers all aspects of dairy evaluation. Students will be able to identify the parts of the dairy cow, use the PDCA Scorecard, and will tour various dairies in the area to evaluate their animals and the management of their operations. (32/0)

*AGS:337 Principles of Dairy Production 3 Credits
An introductory course designed to give an overview of the dairy industry. (32/32)

*AGS:340 Dairy Cattle Evaluation 3 Credits
Covers all aspects of dairy evaluation. Students will be able to identify the parts of the dairy cow, use the PDCA Scorecard, and will tour various dairies in the area to evaluate their animals and the management of their operations. (32/32)

AGS:350 Artificial Insemination of Cattle 1 Credit
This week-long clinical-type course covers the basics of artificial insemination. Emphasizes reproductive physiology, anatomy, semen handling and storage, heat detection, and insemination techniques. Students work with live animals in learning and demonstrating AI skills. (0/32)

AGS:351 Animal Genetics 2 Credits
Covers the principles of basic animal genetics as well as various topics specific to dairy, beef, swine, and other animal breeding. (32/0)

AGS:353 Animal Genetics 3 Credits
Covers the principles of basic animal genetics as well as various topics specific to dairy, beef, swine, and other animal breeding. (48/0)

AGS:354 Applied Animal Selection and Improvement 2 Credits
An applied use of genetic principles for on-farm improvement. (16/32)

*AGS:443 Livestock Building Design 2 Credits
A study of the effects of the environment on the livestock and how we house, feed, water, and handle manure of livestock. (24/16)

AGS:445 Livestock Facility Design 1 Credit
Introduces the principles of farmstead planning and basic livestock building design. The main emphasis will be in sizing and designing the layout of buildings for different livestock situations. Discusses farmstead planning and proper location of buildings. (8/16)

AGS:507 Swine Farrowing and Nursery Management 3 Credits
Emphasizes development of skills in farrowing/nursery record keeping analysis and includes the scheduling, management, and operation of farrowing and weaning facilities. Addresses health, nutrition, environmental control, and ability to identify superior producing animals for breeding. (32/32)

AGS:528 Artificial Insemination of Swine 1 Credit
This week-long, clinical-type course covers the basics of artificial insemination. Emphasis on reproductive physiology, anatomy, semen handling, and storage, heat detection, and insemination techniques. Students will work with live animals in learning and demonstrating artificial insemination skills. (0/32)

AGS:529 Swine Reproduction and Management 2 Credits
Recognizing swine reproductive characteristics and reproductive functions of swine breeding stock. Identifying type and confirmation necessary for economic production. Also deals with breeds, breeding programs, breeding systems, and appropriate management techniques. (32/0)

AGS:803 Dairy Internship I 3 Credits
An opportunity to further develop and practice farm management skills based on objectives set forth in an individual training plan developed with and for each student. An economical, well-managed farm or farm enterprise of appropriate size will serve as the training site. (192 co-op hours)

AGS:804 Animal Science Internship 3 Credits
On-the-job experience in the animal science industry. (192 co-op hours)

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

AGS:813 Dairy Internship II 3 Credits
An opportunity to further develop and practice farm management skills. This experience will be based on objectives set forth in an individual training plan developed with and for each student. An economical, well-managed farm or farm enterprise of appropriate size will serve as the training site. (192 co-op hours)

AGS:823 Dairy Internship III 3 Credits
An opportunity to further develop and practice farm management skills. This experience will be based on objectives set forth in an individual training plan developed with and for each student. An economical well-managed farm or farm enterprise of appropriate size serves as the training site. (192 co-op hours.)

*AGS:944 Animal Agriculture Seminar 1 Credit
Includes material on important issues in animal agriculture which is covered in a student-directed discussion atmosphere. (16/0)

ART: ART

*ART:101 Art Appreciation 3 Credits
A general survey course exploring the elements of art and many artists, their lives, cultures, and media. Field trip required. (48/0)

*ART:120 Two-Dimensional Design 3 Credits
This art studio course introduces the systems and elements of visual organization through two-dimensional design principles and theories using a variety of media. (32/32)

*ART:123 Three-Dimensional Design 3 Credits
An art studio course introducing the systems and elements of visual organization through three-dimensional design principles and theories using a variety of media. (32/32)

*ART:133 Drawing 3 Credits
The study and creation of drawing as an exploration into two-dimensional visual relationships for either the curious beginner or potential art student. Develops an understanding of form, shape, line, and texture through the use of direct observation of and improvisation from the natural and artificial worlds. Explores a variety of wet and dry drawing media. (32/32)

*ART:134 Drawing II 3 Credits
Reviews and further develops methods, skills, and techniques only briefly touched upon in Drawing I. New areas of learning include use of color in dry media such as pastels or colored pencils. Introduces wet media such as pen and ink and brush drawing. Includes a start on drawing the human figure and drawing from fantasy and imagination. (32/32) Prerequisite: A minimum grade of C- in ART:133

*ART:203 Art History I 3 Credits
The study of the visual arts in western civilization including painting, sculpture, and architecture from prehistoric times through the Gothic period. (48/0)

*ART:204 Art History II 3 Credits
The study of the visual arts in western civilization including painting, sculpture, architecture, and photography from the Renaissance through the twentieth century. (48/0)

ASL: AMERICAN SIGN LANGUAGE

*ASL:131 American Sign Language I 3 Credits
Introduces the various systems of manual communications used with deaf and hearing-impaired individuals and others with communication disabilities. The primary focus is to develop a core vocabulary in signs providing a foundation for the subsequent acquisition of skills in signed English and/or American Sign Language. (48/0)

*ASL:161 American Sign Language II 3 Credits
Introduction to American Sign Language (ASL) as used in the deaf community in America. The primary focus is to develop a basic proficiency in using ASL to communicate with the deaf or hard of hearing. (48/0) Prerequisite: ASL:131

*ASL:241 American Sign Language III 3 Credits
Reviews American Sign Language vocabulary and grammatical structures presented in American Sign Language II. Focus is on grammatical and lexical expansion with an emphasis on language in context. (48/0) Prerequisite: ASL:161

Key:
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****Life Skills courses*

*ASL:271 American Sign Language IV 3 Credits
Reviews American Sign Language vocabulary and grammatical structures presented in American Sign Language III. The focus is on grammatical and lexical expansion with an emphasis on idiomatic usage and socio-cultural communicative functions. (48/0) Prerequisite: ASL:241

AUT: AUTOMOTIVE TECHNOLOGY

AUT:102 Introduction to Automotive Technology 1 Credit
Introduces safety practices, an overview of systems that are a part of the Automotive Technology curriculum, and shop tools and diagnostic equipment that will be used throughout the program. (0/32)

AUT:110 Automotive Shop Practices .5 Credit
Shop practice incorporates two basic needs. First is the location and operation of shop equipment, hand tools, and service facilities. Second is the understanding of shop procedures and safety practices including accident and fire prevention. This course initiates students to a proper application of the rules and procedures in both of these areas. (0/16)

AUT:123 Applied Automotive Basics I 4 Credits
Information and practical experience in the basic areas of automotive repair. Emphasizes areas expected to be taught in a high school industrial arts program. Also serves as an overview of automotive systems for students who desire an introduction to automotive repair. (32/64)

AUT:124 Applied Automotive Basics II 3 Credits
Provides information and practical experience for the basic areas of automotive repair. Serves as an overview of automotive systems for students who desire an introduction to automotive repair. (32/32) Prerequisite: AUT:123

AUT:164 Automotive Engine Repair 4 Credits
Detailed study of the construction, operation, and maintenance of automobile engines. The study of automotive engines is a prerequisite to automotive tune-up and service in order to understand the function and relationship of engine component parts. Includes the learning of many services, including overhaul, diagnostic procedures, and operations necessary to engine maintenance and repair. (28/72) Prerequisite: AUT:110

AUT:169 Automotive Engine Repair 9 Credits
Information about automotive engines, engine disassembly, short blocks, cylinder head and valves, camshafts and valve train, lubrication and cooling systems, intake/exhaust systems, and engine sealing. (80/128) Prerequisite: AUT:102

AUT:204 Automotive Automatic Transmissions/Transaxles Service 4 Credits
Covers the types and components of automatic transmissions and their functions. Mechanisms stressed include fluid couplings, torque converters, planetary gear assemblies, and the hydraulic assemblies that control them. Emphasis is placed on adjustment, diagnosis, and test procedures relating to automatic transmissions. (32/64) Prerequisite: AUT:110

AUT:219 Automotive Automatic Transmissions/Transaxles Service 6 Credits
Information and practical experience in automatic transmissions, transaxles, transmission service, diagnosis, and repair, including four-wheel and all-wheel drive systems. (48/96) Prerequisites: AUT:102, AUT:306, AUT:639

AUT:248 Automotive Drive Trains 4.5 Credits
The principles and functions of the automobile power train, consisting of clutches, transmission, drive shaft assemblies, rear axles, and differentials. Includes practical experience in the disassembly, assembly, and repair of all units. (16/108) Prerequisite: AUT:110

AUT:306 Automotive Manual Drive Train and Axles 6 Credits
Information regarding drive axles, differentials, drive shafts, manual transmissions, transaxles, and clutches. (56/80) Prerequisite: AUT:102

AUT:321 Automotive Transmission 2 Credits
Study of components, functions, and maintenance procedures for various transmissions. (8/48)

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

AUT:404 Automotive Suspension and Steering 4 Credits
The principles and functions of the components of the automobile chassis and suspension system and practical instruction in adjusting and repairing suspension and steering systems. Emphasizes alignment and wheel balancing and employing the newest and finest equipment. (32/64) Prerequisite: AUT:110

AUT:405 Automotive Suspension and Steering 5 Credits
Exhaust systems information, diagnosis and repair of tires, wheels, suspension, steering, and alignment. Provides theory and experience in towing and recovery of vehicles. (48/64) Prerequisite: AUT:102

AUT:501 Automotive Brake Systems 1 Credit
A study of various braking systems employed on automobiles. Emphasizes the operation and repair of damaged systems. One week course. (16/16)

AUT:503 Automotive Brake Systems 3 Credits
A complete study of various braking systems employed on automobiles. Emphasizes the operation, adjustment, and repair of both drum and disc types. (16/64) Prerequisite: AUT:110

AUT:505 Automotive Brake Systems 5 Credits
Information about brake systems. Includes drum brakes, disc brakes, power systems, and anti-lock braking systems. (40/80) Prerequisite: AUT:102

AUT:630 Automotive Electrical Systems 5 Credits
Basic facts and fundamental electrical principles having general application in the automotive electrical field. Electrical applications include the starter, generator and alternator, both AC and DC circuits, and all wiring systems. All units are covered in depth including system diagnosis, the extensive use of test equipment, and diagnostic equipment. (48/128)

AUT:639 Automotive Electrical and Ignition Systems 5 Credits
Information regarding theory and practice in the areas of basic electrical and electronic systems, including starting and charging systems, lighting systems, as well as instruments and accessories. (48/64) Prerequisite: AUT:102

AUT:704 Automotive Heating and Air Conditioning 4 Credits
The principles and practical experience in working with air conditioning. Studies component units, their operation and repair, diagnostic procedures, and the use of the newest and finest equipment and techniques in evaluating and changing of the automotive air conditioning. (32/64) Prerequisite: AUT:110

AUT:706 Automotive Heating and Air Conditioning 6 Credits
Information and practical experience regarding auto air-conditioning components and system and the inspection and repair of heating, air-conditioning, safety, and security systems. (48/96) Prerequisite: AUT:102

AUT:809 Automotive Engine Performance 8 Credits
Diagnosis of problems engines encounter in the electrical system, charging system, starting system, and fuel systems. Provides experience in the operation and servicing of all types of emission systems, fuel injection systems, and associated equipment used on today's modern vehicles. (48/160) Prerequisite: AUT:110

AUT:815 Automotive Engine Performance 9 Credits
Information on engine controls, with emphasis on troubleshooting electronic engine control systems, and drivability problem diagnosis and repair including noise, vibration, and harshness. (80/128) Prerequisites: AUT:102, AUT:639

AUT:820 Automotive Tune Up 2 Credits
A basic course in ignition systems and engine tune up. Covers basic concepts, diagnostic relationships, and tune up procedures. Relies heavily on the use of electronic test equipment. (16/36)

AUT:829 Gas Engine Principles 4 Credits
Introduces fundamental aspects of the gasoline engine and maintenance procedures. (24/80)

AUT:830 Gas Support Systems 4 Credits
Provides knowledge for testing and servicing various types of fuel systems, including fuel injection pumps and fuel injection nozzles. Students test and analyze high-tension circuits, high-energy ignition systems, spark plugs, and engine ignition timing. Provides background in understanding water temperature control, water circulation, heater cores, related test equipment, and general service procedures. (32/68)

Key:
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****Life Skills courses*

AUT:871 Automotive Service Management I 2 Credits
Teaches basic operation of a parts store and department. Studies importance of and the different types of parts departments, store operations, personnel duties, and basic parts management procedures. (32/0)

AUT:872 Automotive Service Management II 2 Credits
Covers operation of parts departments and parts stores by studying parts pricing, service charges, marketing, and making sales. (32/0) Prerequisite: AUT:871

AUT:873 Automotive Service Management III 2 Credits
The operation of service departments and the service consultant's role in a service facility, including team approach, checking vehicle and customer records, working with warranties, telephone communications, personal communications. (32/0) Prerequisites: AUT:871, AUT:872

AUT:874 Automotive Service Management IV 2 Credits
Covers the advisors job in working out service details with customers, closing sales, writing and communicating with technicians, work flow, customer relations, and other service advisor duties. (32/0) Prerequisites: AUT:871, AUT:872, AUT:873

BCA: Business Computer Application

***BCA:100 Computer Literacy 1 Credit
Introduces basic concepts of computer use with related "hands-on" experience. (4/24).

BCA:107 Windows and DOS Commands 1 Credit
Provides hands-on experience needed to install and control variants of Windows operating systems and also covers basic DOS commands. (0/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: NET:134

*BCA:112 Introduction to Data Processing 3 Credits
Familiarization with fundamental business data processing applications and concepts. Presents a broad view of data processing topics, and emphasizes the impact of the computer on our society. Students learn the concepts of magnetic storage media, file organization, data representation, communication, input/output, operating system software, telecommunications, and program development. While significant class time is devoted to understanding concepts, students receive practical application experience in the labs. (40/16)

BCA:123 Word Processing Fundamentals 2 Credits
Teaches the basics of using a word processing program to create, edit, and print documents. Covers creating documents with tables, columns, and graphics as well as creation and use of style sheets and templates. (8/48)

BCA:183 Basic Web Design Software 2 Credits
Course focus is on the selection and proper use of some of the various software tools that are available to aid Web designers in developing and maintaining Website material. (16/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: GRA:151

*BCA:212 Introduction to Computer Business Applications 3 Credits
An overview of application software concepts through hands-on exercises. Experience is gained by working through progressively challenging exercises using business application software. Stresses practical use of spreadsheet, word processing, database, graphic programs, and integration. Covers purchasing guidelines for software selection and the impact of hardware systems. (16/64)

*BCA:213 Intermediate Computer Business Applications 3 Credits
Presents advanced practical business applications through hands-on exercises. Experience is gained by working through progressively challenging business-related exercises using a popular word processing, spreadsheet, database, and presentation application program as well as integration of the software applications and an Internet browser. (16/64) Prerequisite: BCA:212

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

BIO: BIOLOGY

*BIO:112 General Biology I 4 Credits
A study of unifying concepts of modern biology with an emphasis on the organization and operation of living systems: metabolism, growth, development, reproduction, and inheritance. (48/32)

*BIO:113 General Biology II 4 Credits
A survey of the form and function of monerans, protists, fungi, plants, invertebrates, and vertebrates, including a study of their ecological interrelationships and discussions of current environmental issues. (48/32)

*BIO:125 Plant Biology 4 Credits
General concepts of botany with an emphasis on basic botanical terminology, anatomy, physiology, taxonomy, and ecology. Special consideration given to the identification and cultural characteristics of local native plants. (48/32)

BIO:149 Body Structure and Function 3 Credits
A basic course emphasizing the structure and function of major components of the human body. (48/0)

BIO:153 Cardiopulmonary Anatomy and Physiology 2 Credits
Focuses on the anatomy and physiology of the cardiopulmonary system and other body systems affecting it. (32/0)

*BIO:157 Human Biology 4 Credits
A survey of the form and function of human body systems, based on chemical, cellular, histological, and organ interrelationships with further emphasis and discussion about the involvement and impact of humans in ecological and social systems. (48/32)

BIO:158 Basic Anatomy and Physiology 2 Credits
Introduces the structure and function of the human body beginning with a study of the molecular, cellular and tissue levels and continuing with emphasis on selected organ systems. (32/0)

BIO:160 Basic Anatomy and Physiology Lab 1 Credit
The basic principles of human anatomy and physiology based on laboratory experimentation in microscopy and dissection with emphasis on the atomic, cellular, tissue, and organ system levels of organization. (0/32) Pre-/corequisite: BIO:158

*BIO:165 Human Anatomy and Physiology I 3 Credits
Introduces the structure and function of the human body, beginning with a study of the molecular, cellular and tissue levels and continuing with emphasis on selected organ systems. (48/0) Prerequisites: One year high school Biology/Chemistry or college equivalent with minimum grade of C-; or a minimum grade of C- in BIO:112, BIO:157, CHM:110, or SCI:001

* BIO:167 Human Anatomy and Physiology I Lab 1 Credit
Basic principles of human anatomy and physiology based on laboratory experimentation in microscopy and dissection, with emphasis on the atomic, cellular, tissue, and organ system levels of organization. (0/32) Pre-/corequisite: BIO:165

*BIO:170 Human Anatomy and Physiology II 3 Credits
Continues the study of structure and function of the human body introduced in Human Anatomy and Physiology I, with review of the molecular, cellular, and tissue levels of organization and emphasis on selected organ systems. (48/0) Prerequisite: A minimum grade of C- in BIO:165

*BIO:172 Human Anatomy and Physiology II Lab 1 Credit
A study of basic principles of human physiology based on laboratory experimentation, with emphasis on neurophysiology, respiratory physiology, lymphatic and immune functions, digestive physiology, and cardiovascular physiology. (0/32) Pre-/corequisite BIO:170

*BIO:183 Microbiology 3 Credits
An introductory course stressing the characteristics of microorganisms and their relationship to man. Emphasizes bacteriology, immunity, sanitation, disinfection, and asepsis. (48/0) Prerequisites: One year of high school Biology/Chemistry or college equivalent with a minimum grade of C-; or a minimum grade of C- in BIO:112, BIO:157, CHM:110, or SCI:001

*BIO:184 Microbiology Lab 1 Credit
Laboratory experience exploring the characteristics of microorganisms and their influence on society. (0/32) Pre-/corequisite: BIO:183

Key:
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****Life Skills courses*

*BIO:190 Introductory Biotechnology 3 Credits
Divided into three major sections, this course explores the myriad of technologies involving DNA. Section one flows from initial observation that DNA might be the heredity material to the structure and operation of DNA in the living cell. Section two discusses the development of thought that led to DNA technology, and some of the technical problems leading the DNA technology is experienced. Section three surveys contemporary DNA technology and its uses in various fields. (48/0) Prerequisite: One semester college biology or two years high school biology

BIO:200 Basic Microbiology 1 Credit
Introductory course stressing the characteristics of microorganisms and their relationship to man. Emphasizes bacteriology, immunity, sanitation, disinfection, and asepsis. (16/0)

BIO:201 Basic Microbiology Lab .5 Credit
A laboratory experience exploring the characteristics of microorganisms and their influence on society. (0/16) Pre-/corequisite: BIO:200

*BIO:248 Introduction to Bioscience Technology 4 Credits
Explores the expanding field of biotechnology and how it impacts science and society. Examines fundamental biological, chemical, and mathematical principles as they apply to biotechnology. Laboratory activities emphasize essential methodologies employed in scientific inquiry and experimentation. (48/32) Prerequisite: Minimum Accuplacer math score of 44 or a minimum grade of C- in MAT:053

BUS: BUSINESS

*BUS:103 Introduction to Business 4 Credits
Exposes students to the role of the bookkeeper, manager, and junior accountant in relation to the many facets of the business world, including the economic system, marketing functions such as sales, production, and finance, and types of business organizations. (64/0)

BUS:112 Business Math 3 Credits
A study of mathematical skills using calculators as related to career requirements of office and/or store employees. Emphasis is placed on problem solving. (32/32)

BUS:121 Business Communications 3 Credits
A study of modern trends in business communication including writing of letters, memos, and reports which are courteous, complete, clear, correct, and concise. Emphasizes editing and proofreading for accuracy and expression. (48/0) Prerequisite: ENG:013 or ENG:021 or ENG:105

*BUS:130 Introduction to Entrepreneurship 3 Credits
A survey course designed to orient students toward the multi-dimensions of a career in entrepreneurship. Explores entrepreneurial qualities, assessment of various funding sources, strategic planning for entrepreneurial ventures, and legal and contemporary business environment issues. (48/0)

*BUS:132 Introduction to Managerial Decision Making 3 Credits
A dynamic, comprehensive foundation for sound managerial decision making based on the effective and efficient use of entrepreneurial and economic resources and information. (48/0) Prerequisite: ECN:110

*BUS:133 Entrepreneurial Studies 3 Credits
Building on the foundation established in the Fundamentals of Entrepreneurship course allows analysis of the integration of the functions necessary for successful entrepreneurship. Areas emphasized: developing a plan for the small business, financial analysis of alternate forms of financing, developing a marketing plan for the small business, management of small business operations, and legal and ethical considerations in small business ownership. (48/0) Prerequisite: BUS:130

*BUS:137 Innovation and Strategic Business Planning 3 Credits
Integrates entrepreneurial strategy in the daily processes of the small business. Vision and mission, company overview, product/service strategy, market analysis, market plan, financial plan, and construction of supporting documents are required elements of this student project-centered course. (48/0) Prerequisites: BUS:130, BUS:133

BUS:180 Business Ethics 3 Credits
Covers major ethical issues facing business practitioners through a study of ethical principles and procedures of analysis, application of these methods to crucial questions of professional conduct and responsibility, and their application to selected business problems of timely interest. (48/0)

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

*BUS:185 Business Law I 3 Credits
Presents material essential to an understanding of law as it applies to the following topics: history, crimes and torts, contract law, and sales (UCC). (48/0)

*BUS:186 Business Law II 3 Credits
Presents material essential to an understanding of law as it applies to individuals and entities engaged in commerce. The Uniform Commercial Code (UCC) as it applies to sales and negotiable instruments is emphasized. Other topics include consumer protection laws, employment, insurance, and secured transactions. (48/0) Prerequisite: BUS:185

*BUS:188 Legal Environment of Business 3 Credits
Provides basic understanding of business law in the areas of: law and ethics, commercial paper, government regulation, specific federal and state laws, agency and employment, property, and business organization. (48/0)

*BUS:198 Leadership Skills 3 Credits
An introduction to the leadership process through self-assessment and development of leadership skills needed for career goal achievement as well as personal development. (48/0)

*BUS:211 Business Statistics 4 Credits
An introduction to basic statistical concepts including descriptive statistics and inferential statistics through simple hypotheses testing. (48/32)

*BUS:214 Statistics for Business and Economics 3 Credits
A further study of the basic methods of statistical reasoning. Students will apply and interpret probability and statistics to business and economic problems. (48/0) Prerequisite: MAT:156

*BUS:261 Principles of Insurance I 3 Credits
A basic background in insurance and includes the study of the more common types of insurance, the features of each, insurance marketing, and organization of the industry. (48/0)

*BUS:262 Principles of Insurance II 3 Credits
A basic background in health, accident, life, and disability insurance, including the more common types of insurance the features of each, insurance marketing, and industry organization. Covers agent licensing. (48/0)

BUS:270 Casualty and Claims Practices 3 Credits
Designed to help students complete the documents necessary to report, adjust, and settle claims. (48/0)

CAD: Computer Aided Drafting

CAD:104 Computer Aided Drafting 3 Credits
Provides a draftsperson with essential information about computer graphics, practice exercises to prepare for design station activity, and numerous "hands on" exercises. The goal is to gain sufficient skill to construct computer drawings while inputting construction geometry into computer memory and retrieving the information for use in design, drafting, and/or production activities. (32/32)

CAD:165 Rendering and Animation 3 Credits
Introduces the creation of two- and three-dimensional animations using specially designed software and activities. (32/32) Corequisite: CAD:175

CAD:172 Introduction to CAD: AutoCAD 2 Credits
Introduces various drafting techniques available through computer-aided design technology. Students study problems and prepare design station activities that apply to their individual programs of study. (16/32) Prerequisite: SDV:200

CAD:175 Advanced CAD: AutoCAD 2 Credits
The student will demonstrate the ability to set a typical and customized working environment, exhibit advanced editing strategies, create and employ symbols libraries, and make customized menus for the CAD drafting system. Students receive work in 3D and modeling and gain increased knowledge and proficiency in using the CAD system. (16/32) Prerequisite: CAD:104 or CAD:172 or instructor approval

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

CHM: CHEMISTRY

*CHM:110 Introduction to Chemistry 3 Credits
The structure of the atom, elements and their combinations, and chemical equality. Emphasis is placed on the periodic table. (48/0)

*CHM:111 Introduction to Chemistry Lab 1 Credit
A laboratory experience that supports and applies basic concepts of inorganic, organic, and biochemistry, using scientific methods of inquiry. (0/32) Pre-/corequisite: CHM:110

*CHM:160 Chemistry I 3 Credits
Deals with the structure of the atom, elements and the periodic table, chemical formulas, chemical equations, bonding, thermochemistry, gases, liquids and solids, and solution chemistry. (48/0) Prerequisite: MAT:102 or one year high school chemistry

*CHM:161 Chemistry I Lab 1.5 Credits
Development of chemistry laboratory discipline, procedures, and skills through a selection of experiments in inorganic chemistry and simple quantitative analysis. Includes appropriate personal and environmental safety procedures as a necessary part of the chemistry laboratory experience. (0/48) Pre-/corequisite: CHM:160

*CHM:170 Chemistry II 3 Credits
A continuation of Chemistry I covering solution chemistry, chemical kinetics, thermodynamics, transition metals, electrochemistry, non-metals, and nuclear reactions. (48/0) Prerequisite: CHM:160

*CHM:171 Chemistry II Lab 1.5 Credits
A continuation of CHM:161 for further development of laboratory skills and discipline. More advanced experiments are selected to reinforce the classroom learning experience typically associated with a second semester general chemistry course. (0/48) Prerequisites: CHM:161, CHM:170

*CHM:262 Organic Chemistry I 4.5 Credits
Designed to be equivalent to the first semester of organic chemistry offered at four-year institutions. The course meets for three hours of lecture-discussion and three hours of laboratory each week. Laboratory work correlates with lecture topics. (48/48) Prerequisites: CHM:160 and CHM:170, or the equivalent of a freshman general chemistry sequence

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

CIS: COMPUTER PROGRAMMING

CIS:115 Introduction to the AS/400 1 Credit
Introduces the AS/400 concepts and operations. Emphasizes general operations, database files, output manipulation, and screen design. (8/16)

CIS:120 Introduction to Programming Logic 2 Credits
Basic introduction to the design and development cycles utilized in many computer-related occupations. Covers structured program and graphic design processes. Students will be responsible for designing logic, storyboards, thumbnail sketches, hierarchy charts, and related design specifications and models for a variety of problems using various design methods and tools. (8/48)

*CIS:125 Introduction to Programming Logic w/Language 3 Credits
Introduces programming using Visual Basic.Net. Provides experience and practice in designing and writing a variety of programs utilizing Visual Basic.Net which help develop a deeper understanding and appreciation of the computer, its capabilities and limitations, and of application software. (32/32)

*CIS:142 Computer Science 4 Credits
A continuation of the course Introduction to Computer Programming (Visual Basic). Introduces the structured programming language, C++, and prepares students for a course in data structures. (32/64) Prerequisite: A minimum grade of C- in CIS:125

*CIS:153 Data Structures 4 Credits
Teaches data structures using the C++ object oriented programming language. Prepares students for many higher level computer programming courses and gives a background to understand any type of data structure used in computer programming. Applications for the Disk Operating System (DOS) and Windows Operating System will be programmed. (48/32) Prerequisites: CIS:142 or CIS:164

CIS:160 Introduction to Visual Languages 3 Credits
Introduces basic elements of programming in a visual language. Students become familiar with object-oriented program design, syntax, and logic structures by gaining

experience and practice in designing and coding a sequence of increasingly complex programs. Stresses good form design principles and structured and modular programming concepts. (32/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:120

*CIS:161 C++ 3 Credits
Introduces the basic elements of procedural C++ programming. Students become familiar with the syntax and logic structures of C++ by gaining experience and practice in designing and coding a sequence of increasingly complex programs. Introduces object-oriented C++ programming later in the course. (32/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:120

*CIS:164 Advanced C++ 3 Credits
Focuses on object-oriented C++ programming. Students learn advanced logic structures of C++ by gaining experience and practice in designing and coding a sequence of increasingly complex programs. (32/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:161

*CIS:170 Java 2 Credits
Fundamental knowledge to write applications in Java. Good form design principles, structured and modular object and visual programming concepts are stressed throughout the course. Requires programming a series of applications in a Java environment. (12/40) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:120

CIS:205 Fundamentals of Web Programming 2 Credits
Introduces the basics of the creation and maintenance of home and Web pages using the hypertext markup language. Stresses good screen layout and design principles. Covers the use of application software to create Web pages. Explores enhancements and extensions of HTML as well as the incorporation of scripting and creating Web pages. (8/48)

CIS:207 Fundamentals of Web Programming 3 Credits
The basics of the Internet and creation and maintenance of home and Web pages using Hypertext markup language. Stresses good screen layout and design principles. Uses application software, including paint programs in designing graphics. (32/32) Prerequisite: SDV:200 or equivalent experience

CIS:212 Designing and Building Websites 2 Credits
Website planning and designing with emphasis on the client and working in a collaborative team environment to design Websites. (16/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:205

CIS:214 Server Side Web Programming 2 Credits
Introduces Java Script as a tool for creating Web pages. Students learn JavaScript's unique method for programming decision-making events, and will create forms, frames, functions, objects, and events using the JavaScript format. Combines lecture and labs to assist in understanding these concepts. (32/0) Prerequisite: A minimum grade of C- in CIS:207 or equivalent college-level course in programming or instructor approval

*CIS:223 Adobe Web Design 4 Credits
Introduction to Web design focusing on the overall production processes with particular emphasis on design elements involving layout, navigation, and interactivity. (32/64) Prerequisite: BCA:112 or instructor approval

CIS:235 Website Management and Web Security 2 Credits
The management, maintenance, and security of Websites. Taught with a mix of theory and hands-on applications. (16/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: NET:248; and CIS:207 or CIS:212

CIS:236 Internet: HTML 1 Credit
Introduces the basics of the Internet and the creation and maintenance of home and Web pages. The hypertext markup language is used in the creation of home and Web pages. Stresses good screen layout and design principles. Explores the use of application software to create Web pages. (8/20)

CIS:271 Principles of E-Commerce 2 Credits
Focuses on the planning and design of Websites used for e-commerce. Emphasis is on the client with ethical business practices stressed throughout. (16/32)

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

CIS:273 E-Commerce and E-Business 2 Credits
The planning, design, maintenance, and security of Websites used for e-commerce. Taught with emphasis on the client, with ethical business practices stressed throughout. (16/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: GRA:151, NET:248

*CIS:303 Introduction to Database 3 Credits
An introduction to managing a database. Database terms are identified and definitions are standardized. An understanding of the physical and logical organization of data and the meaningful representation of data relationships and structures are presented and reinforced with hands-on examples. Evaluates methods to achieve these logical relationships such as linked lists, chains, pointers, and inverted files. (32/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst or Computer Technology major. Prerequisites: BCA:112, BCA:212, CIS:115

CIS:309 Graphical Database Concepts 1 Credit
Focuses on tips and techniques for storing graphical images using basic database design. Discusses file-naming conventions and search techniques. (8/16) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: GRA:220, GRA:230

*CIS:310 Intermediate Database 3 Credits
Provides fundamental knowledge of creating application programs using a database management package. Covers structured program design, form design, methods, macro, event programming, debugging, and maintaining the environment. (32/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:120, CIS:303

CIS:400 Introduction to Procedural Languages 3 Credits
Introduces the basic elements of procedural languages. Presents logical structures, modular design, documentation techniques, and file handling techniques. Familiarizes students with the syntax and logic structure of procedural languages by applying the language to a sequence of increasingly complex business application programs. (32/32) Prerequisites must be passed with a minimum grade of C- to progress in the Computer Analyst major. Prerequisites: CIS:115, CIS:120

* CIS:402 COBOL 3 Credits
Introduces basic elements of structured COBOL programming. Presents logical structures, modular design, documentation techniques, and file handling techniques. Builds familiarity with the syntax and logic structure of COBOL by applying the language to a sequence of increasingly complex business application programs. (32/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:115, CIS:120

*CIS:411 COBOL II 2 Credits
Knowledge of structured COBOL programming is used in the development of applications. Logical structures, modular design, documentation techniques, program maintenance, file handling techniques, and interactive programming are expanded and practiced through the use of increasingly complex programs. Students will build a style and develop debugging skills. (16/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:402

CIS:420 Advanced Procedural Languages 3 Credits
Uses knowledge of procedural programming languages to develop applications. Logical structures, modular design, documentation techniques, program maintenance, array and table handling, searching and sorting, file handling, and advanced interactive programming will be expanded and practiced through use of increasingly complex programs. The student will build a style and develop debugging skills. (32/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:400

*CIS:505 Structured Systems Analysis 4 Credits
Information needed for effective participation in a business environment dependent upon computers and their applications. Emphasizes the application of a structured, top-down process for the development of computer-based information systems, the concept of a system development life cycle, and methods for managing the complex tasks associated with the various system development life cycle phases. (32/64) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst or Computer Technology Network Administrator major. Prerequisites: BCA:112, ENG:105, SPC:112, Sociology/Psychology elective

Key:
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****Life Skills courses*

*CIS:523 Beginning RPG 3 Credits
The Report Program Generator language is used to facilitate the preparation of business reports. Introduces the basic elements of structured programming and specifications unique to the R.P.G. language. Students become familiar with the syntax and logic structure of RPG by applying the language to a sequence of increasingly complex application programs. (32/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:115, CIS:120

CIS:550 CL Commands 1 Credit
Introduces Control Language concepts and operations. Areas emphasized are command syntax, operations, system communication, and input/output programming. (0/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:115, NET:134

CIS:595 MVS/JCL Commands 1 Credit
Provides experiences needed to effectively control the operation and resource allocation of an IBM mainframe computer system through the use of Job Control Language (JCL). (0/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: NET:134

*CIS:603 Visual Basic 2 Credits
Fundamental knowledge to write applications in Visual Basic for use in a Window environment. Stresses good form design principles and structured and modular programming concepts. Students are required to program a series of business applications in the Visual Basic environment. (16/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:120

*CIS:611 Advanced Visual Basic 2 Credits
Teaches advanced Visual Basic programming statements and techniques to design and write more advanced applications for use in a Windows environment. Stresses good form design principles and structured and modular programming concepts. Programming a series of complex business applications in the Visual Basic environment is required. (16/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:303, CIS:603

CIS:614 Advanced Visual Languages 3 Credits
Provides knowledge of advanced programming techniques with a focus on object-oriented programming. Students learn advanced logic structures by designing and coding a sequence of increasingly complex programs and gain exposure to programming in a group environment. (32/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:160

*CIS:615 Post-Advanced Software Applications 3 Credits
Advanced data processing concepts which include using visual basic to complete practical applications for spreadsheets and charting, word processing, database management, and presentation graphics. (16/64) Prerequisites: BCA:212, BCA:213

CIS:702 UNIX/LINUX 1 Credit
Provides hands-on experience needed to install and control the UNIX/LINUX operating system. (0/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: NET:134

CIS:722 Help Desk Concepts 2 Credits
Provides an understanding of technical support issues faced within the computer industry. Discusses the role of the help desk and decisions which affect the success of technical support. Emphasis is placed on how people, processes, technology, and information affect the typical help desk. (24/16) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: BCA:112. Pre-/corequisite: CIS:303

CIS:723 Help Desk Concepts 3 Credits
Provides an understanding of technical support issues faced within the computer industry. Discusses the role of the help desk and decisions which affect the success of technical support. Emphasis is placed on how people, processes, technology, and information affect the typical help desk. (32/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: BCA:112. Pre-/corequisite: CIS:303

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****Life Skills courses*

CIS:724 Help Desk Customer Support 2 Credits
Provides exposure to the basics of help desk support activities and the knowledge base and skill set to provide valuable customer support to clients. Contains both a theory component and lab activities using simulations and scenarios to reinforce and emphasize practical applications of help desk customer support concepts. (24/16) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: BCA:212, CIS:731. NET:115; and PSY:111 or PSY:112 or PSY:251 or SOC:110 or SOC:208

CIS:725 Producing Training and Job Aids 1 Credit
Provides an understanding of the importance and use of training and job aids within the field of tech support and computer training. Students practice skills necessary to produce training and job aids. (4/24) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:731; and CIS:207 or CIS:212

CIS:727 Training and Tech Support Project Seminar 3 Credits
A training solution or support plan is designed for a simulated or real business allowing students to synthesize knowledge and skills developed in previous training and tech support courses. (16/64) Prerequisites must be passed with a minimum grade of C- to progress in the Computer Analyst major. Prerequisites: CIS:505, CIS:724, CIS:725, CIS:730

CIS:730 Techniques of Training 3 Credits
Provides the skills needed to design, develop, and deliver effective computer training to computer users. (16/64) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:731

CIS:731 Communication for the Computer Analyst 2 Credits
Introduces fundamental concepts and terminology needed to enhance communication skills within the computer industry. Emphasizes development of analytical reading skills to empower students to understand technical material and improve skills in written and oral communication of technical material, reports, and sets of instructions. Stresses proper computer-related communication and terminology. (16/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: BCA:112, BCA:212, ENG:105

CIS:800 Computer Project Seminar 3 Credits
Students develop a computerized solution to a simulated or real business problem. The system will be developed in a team environment emphasizing the knowledge and skills developed in previous computer courses. System needs will be assessed to determine the most appropriate solution to the specifications. Explores emerging trends and new topics in information technology. (16/64) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:303, CIS:505, CIS:731; and one programming language: CIS:160, CIS:400, CIS:420, CIS:614

CIS:801 Ethical and Security Issues in Cyberspace 2 Credits
Course focus is to provide a basic understanding of legal and ethical issues relating to cyberspace as well as a background in cyberspace security. (32/0) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: BCA:112

CIS:805 Internet Administration Project Seminar 3 Credits
A Website is designed for a simulated or real business allowing students to synthesize knowledge and skills developed in previous Internet courses. Emerging trends and new topics in Internet technology are explored. (8/80) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:731

CLS: CULTURAL STUDIES

*CLS:150 Latin American History and Culture 3 Credits
Briefly examines the history of Latin America from the late Pre-Columbian era to the present. This historical sketch provides chronological context in which to examine the emergent Latin American culture and trace its development. An interdisciplinary approach is used to draw upon history, literature, film, and guest speakers to provide first-hand exposure to Latin American works. Emphasizes social structures, politics, religion, and intellectual life. Presents many principal aspects of this complex culture. (48/0)

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****Life Skills courses*

*CLS:170 Russian History and Culture 3 Credits
(Also listed as HIS:214.) Acquaints students with major developments in Russian history and culture from all recorded periods beginning with Kievan Rus' to Yeltsin's era in the 1990's. Special emphasis includes the ordinary life of common people that will enrich an understanding of Russian history and culture. The course goal is to introduce the way Russians have related to their history and cultural heritage while broadening the students' language and critical thinking skills through reading, listening, speaking, and writing. (48/0)

COM: COMMUNICATION

**COM:020 Communication Skills 3 Credits
Provides opportunity to develop as an effective employee. Emphasizes listening, speaking, writing, and reading as these relate to student career needs. Course is geared primarily to students in diploma programs. (32/32)

*COM:120 Organizational Communication 3 Credits
An applied and theoretical approach to investigate the formal and informal communications processes found in organizations. Applied aspects include interviewing, group work, formal and informal presentations, and managing organizational communications through telecommunications technologies. Theoretical aspects explore and analyze the functional approach, the meaning-centered approach, and several emerging perspectives on organizational communication. (48/0)

*COM:140 Introduction to Mass Media 3 Credits
An overview of each major medium, as well as related laws, ethics, and technology. Explores the history, theory, and industry of mass media and their connection with the advertising and public relations industries. Students examine how the media has evolved and its role in society. (48/0)

*COM:145 Public Relations Media 3 Credits
Exploration and practical experience in various research and writing techniques to produce materials for print, electronic, and digital media. Provides background in principles of public relations including public opinion, media laws and ethics, and persuasion. (48/0) Prerequisites: COM:155 with a grade of C-; and BCA:212 or SDV:200

*COM:155 Newspaper Production 3 Credits
Instruction and practical experience in the fundamentals of journalistic writing and reporting. Introduces interviewing techniques. Typing skills strongly recommended. (48/0) Prerequisite: A minimum grade of C- in ENG:105 or an equivalent college-level course in composition

**COM:723 Workplace Communications 3 Credits
Opportunity to develop as competent employees through instruction and practical application of communication skills expected in the work environment. Emphasizes listening, speaking, and writing skills as they relate to the career needs of the students. Course is geared primarily to students in Association of Applied Science programs. Previous or current enrollment in SDV:200 or computer literacy is recommended. (48/0)

COM:936 Occupational Experience 3 Credits
Provides practical experience in news writing, reporting, and publications production. Students will work with a local business to access information, write articles, edit material, and complete other duties as assigned by an editor or employer. Students will be assessed on completed projects related to the business and assignments made by NICC faculty. (192 co-op hours) Prerequisites: COM:155 and Communication faculty approval

CON: CONSTRUCTION

CON:111 Basic Drafting 2 Credits
Fundamental knowledge of the principles of drafting equipment, lettering, freehand orthographic and pictorial sketching, and orthographic instrument drawing. Includes lettering, dimensioning, symbols, conventions, sections, and details. (16/32)

CON:113 Construction Print Reading 2 Credits
Stresses principles of interpreting trade blueprints and reading of specifications basic to all aspects of the trades. Deals with types of lines, development and

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arrangement of views, dimensioning practices, and invisible edges. Incorporates practical problems from prints suited to the particular trade. (16/32)

CON:141 Basic Construction Skills 2 Credits
Provides basic background to the construction industry. Students gain a better understanding of the skills, knowledge, and abilities required to be a successful crafts person. This course incorporates an in-depth review of OSHA Safety Rules designed to familiarize students with National Safety Standards for residential and commercial construction (16/32)

CON:166 Construction Lab I: Foundations 4 Credits
Offers hands-on experience performing skills learned during Construction I lectures. During this lab experience, students will enroll online via CareerSafeOnline.com, and complete and receive certification in the ten-hour OSHA Construction Industry Safety Standards. (0/128) Pre-/corequisites: CON:141, CON:375, proof of First Aid/CPR certification

CON:375 Construction I 3 Credits
Introduces site layout, concrete foundations and flat work, concrete forming, and the handing, placement and concrete finishing. (48/0) Pre-/corequisites: CON:141, proof of First Aid/CPR certification

CON:376 Construction II 4 Credits
Designed for students with little or no experience in residential construction procedures. Instruction covers aspects of residential construction in both the laboratory and classroom. Students will gain knowledge of the construction trade, materials used, hand and power tools, floor systems, wall and ceiling framing, roof framing, and window and exterior doors. (64/0) Prerequisites: CON:141, proof of First Aid/CPR certification

CON:378 Construction Lab II 10 Credits
Emphasizes construction of residential and/or small commercial type structures. Provides practical instruction and hands-on learning in safe/proper tool usage, floor systems, wall, ceiling, and roof framing, roof finishing, and windows and exterior doors installation. Involvement in realistic practical construction projects will influence scheduling of these activities as well as necessitate inclusion of experiences related to the occupation. (0/320) Pre-/corequisites: CON:141, CON:376, proof of First Aid/CPR certification

CON:379 Construction III 4 Credits
Designed for students with little or no experience in residential construction procedures. Instruction covers aspects of residential construction in both the laboratory and classroom. Students gain knowledge of exterior finishing, metal studs, stairs, dry walling, interior doors, ceilings, trim, and cabinet installation. (64/0) Pre-/corequisites: CON:141, proof of First Aid/CPR certification

CON:381 Construction Lab III 10 Credits
Emphasizes construction of residential and/or small commercial type structures. Provides practical instruction and hands-on learning in exterior finishing, stairs, dry walling, interior doors, ceilings, trim, and cabinet installation. Involvement in realistic practical construction projects will influence scheduling of these activities as well as necessitate inclusion of experiences related to the occupation. (0/320) Pre-/corequisites: CON:141, CON:379, proof of First Aid/CPR certification

CON:382 Construction IV 5 Credits
Designed for students with little or no experience in residential/commercial construction procedures. Instruction covers aspects of residential construction in both the laboratory and classroom. Students gain knowledge and participate in practical instruction and application of advanced: site layout, roof, floor, wall, and stair systems, use of light equipment, welding, metal buildings, and building skills to be a crew leader. Involvement in realistic practical construction projects will influence scheduling of these activities as well as necessitate inclusion of experiences related to the occupation. (48/64) Prerequisites: CON:141, proof of First Aid/CPR certfication

CON:383 Building Codes and Specifications 3 Credits
A study of the construction building codes recommended by U. S. government agencies, the National Board of Fire Underwriters, and Electrical Code. Also presents the development of specifications as used by the construction trades. Specifications guide the complete construction process as to kind and quality of materials, workmanship, and the relationship of the parties concerned with specific projects. (48/0) Pre-/corequisites: CON:375, CON:376, CON:379, CON:382

CON:384 Cabinet Making 5 Credits
Designed to provide basic skills and knowledge to construct and finish kitchen cabinets and casework. (32/96)

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CON:385 Construction Estimating 3 Credits
Involves reading and understanding working drawings to the point cost, time, labor, and material estimates can be made for the construction project. (48/0) Pre-/corequisites: CON:375, CON:376, CON:379, CON:382

COS: COSMETOLOGY

COS:110 Basic Principles in Cosmetology 4 Credits
The first of a series of courses in the area of cosmetology and is required before advancement into other courses. Professional ethics, visual poise, hygiene, and good grooming are but a few of the areas of emphasis, along with the safety and use of disinfection to protect the student and the general public. (64/0)

COS:111 Cutting and Styling Techniques 2 Credits
Teaches the various techniques of hair cutting and the tools that are used on the various hair textures as well as the fundamentals of hair styling. (32/0)

COS:112 Care of Skin and Scalp 2 Credits
Provides a foundation of skin and scalp care and a basic understanding of the principles used in giving skin, scalp, and hair treatments. (32/0) Prerequisite: COS:110

COS:113 Chemical Services I 2 Credits
The history of permanent waving and how it has been perfected for today's world. Includes various methods of wrapping and where these methods should be used. (32/0)

COS:114 Chemical Services II 2 Credits
Provides an understanding of nail care. Principles of nail diseases and disorders, manicuring, pedicuring, nail extensions, acrylics, wraps, and gels will be outlined and reviewed. (32/0) Prerequisite: COS:110

COS:115 Legal Aspects of Cosmetology 2 Credits
Presents legal requirements necessary to become a licensed cosmetologist. Emphasizes the laws that must be followed in owning and operating a salon. Enables students to meet state board examination. (32/0)

COS:116 Salon Management 2 Credits
Foundation on how to work in and/or operate a cosmetology salon. Examines business principles, bookkeeping, insurance, salesmanship, psychology, and salon policies. (32/0) Prerequisite: COS:110

COS:117 Comprehensive Cosmetology Review 2 Credits
Overview of all previous classes required and successfully completed. Students will be prepared for the state board examination as well as for becoming successful cosmetologists. (32/0)

COS:118 Practical Cosmetology Skills I 8 Credits
The first in a series of cosmetology course practicums required before advancement into the other practicums. In labs, students will demonstrate proper hygiene, good grooming, as well as salon sterilization techniques. Emphasizes protection of the student and general public. (32/0 and 288 clinic hours)

COS:119 Practical Cosmetology Skills II 7 Credits
Students will demonstrate and execute the fundamentals of the various techniques of hair styling and cutting, learn how to use tools and styling aids for different hair textures, and continue to build on all cosmetologist skills. (32/0 and 240 clinic hours) Prerequisites: COS:110, COS:159

COS:120 Practical Cosmetology Skills III 6 Credits
Students will identify various techniques of skin and scalp care as well as demonstrate different massage treatments and other methods of treatments for healthy skin and scalp. (16/0 and 240 clinic hours)

COS:121 Practical Cosmetology Skills IV 7 Credits
Students will demonstrate chemical services in the lab setting. Implementation of permanent waving methods, application of different hair coloring services, hair relaxing and hair pressing, manicuring, pedicuring, and knowledge of nail diseases and disorders. (32/0 and 240 clinic hours) Pre-/corequisite: COS:120 or COS:160

COS:122 Practical Cosmetology Skills V 6 Credits
Provides a strong foundation on how to run and/or own a beauty salon along with knowledge of business principles, bookkeeping, insurance, salesmanship, psychology, and salon policies crucial to the cosmetologist. (16/0 and 240 clinic hours)

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

COS:123 Practical Cosmetology Skills VI 7 Credits
Reviews and expands on cosmetology safety procedures, skills, practical theory applications, and legal requirements in the field of cosmetology. (32/0 and 240 clinic hours) Pre-/corequisite: COS:122 or COS:161

COS:124 Practical Review .5 - 3 Credits
An overview of manipulative skills designed to provide practical hands-on experience in the cosmetology area. Allows individual options for practical experience including an overview of cosmetology theory and application with emphasis on the technical advances in the field. (0/16-96)

COS:155 Haircutting and Styling Techniques 1 Credit
Teaches advanced haircutting procedures, how to use different tools for hair textures, and hair styling techniques. (16/0) Prerequisite: COS:110

COS:156 Chemical Services I 3 Credits
An educational approach to the significance of general anatomy and physiology, basics of chemistry, basics of electricity, chemical texture services, and hair coloring. Students gain knowledge of cosmetology practices and understanding of the cosmetology profession. (48/0) Prerequisite: COS:110

COS:157 Legal Aspects of Cosmetology 1 Credit
Presents the legal requirements necessary to become a licensed cosmetologist. Emphasizes knowledge of laws that must be followed while working and/or owning and operating a cosmetology salon. Course enables students to meet the state board examination. (16/0) Prerequisite: COS:110

COS:158 Comprehensive Cosmetology Review 3 Credits
An overview of all previous classes required and successfully completed. Preparation for state board examination and for becoming a successful cosmetologist. (48/0) Prerequisite: COS:110

COS:159 Practical Cosmetology Skills I 6 Credits
The first of a series of cosmetology course practicums. Required before advancement into the other practicums. Labs will demonstrate proper hygiene, good grooming, and sanitation techniques. Students will demonstrate basic cosmetology procedures. Emphasizes protection of the student and the general public. (32/0 and 192 clinical hours) Corequisite: COS:110

COS:160 Practical Cosmetology Skills III 7 Credits
Identification of various techniques of skin and scalp care. Students will demonstrate different massage treatments and other treatments for healthy skin and scalp. Students will continue to demonstrate and build on cosmetology skills. (16/0 and 288 clinical hours) Pre-/corequisite: COS:119

COS:161 Practical Cosmetology Skills V 7 Credits
Knowledge of business principles, bookkeeping, retail sales, and salon policies designed for the cosmetologist. Course builds on previous practical skills needed to be a successful cosmetologist. (16/0 and 288 clinical hours) Prerequisite: COS:121

COS:801 Practical Nail Technology Skills I 2.5 Credits
Applies the basic structures and functions to the practice of nail technology. Gives a scientific background for nail services offered by the nail technologist in a salon setting. (125 clinical hours)

COS:802 Practical Nail Technology Skills I 3.5 Credits
Applies the basic structures and functions to the practice of nail technology. Gives a scientific background and practical application for nail services offered by the nail technologist in a salon setting. (12/0 and 132 clinical hours) Prerequisite: COS:110

CRJ: Criminal Justice

*CRJ:100 Introduction to Criminal Justice 3 Credits
An overview of the U. S. criminal justice system introducing the institutions, individuals and mechanics of the criminal justice system and the constitutional and statutory framework as they relate to criminal justice issues. Examines the basic operation of this system as well as the structural and procedural changes which have occurred over recent years. (48/0)

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

*CRJ:111 Police and Society 3 Credits
An introductory course of law enforcement topics and policing problems in today's society with emphasis on personnel systems, operations, the history, culture, and behaviors of the police environment. Explores ethical and practical issues facing police and police operations. Introduces issues regarding civil liability for police and departments, police discretion, community policing and diversity. Analyzes the attitudes and styles of and toward the policing community. (48/0) Prerequisite for (AA) Criminal Justice students only: CRJ:100

*CRJ:120 Introduction to Corrections 3 Credits
A survey course reviewing the history, development, and functions of the correctional system and programs. Introduces the history, philosophies, goals, and processes of the correctional system with an emphasis on the U. S. correctional system. Students learn about the purposes and goals, and the methods to achieve the goals of the corrections system and examine the system components from the legal, ethical, and functional perspectives. (48/0)

*CRJ:124 Deviance and Crime 3 Credits
An introductory course which defines deviance and introduces the behaviors, conditions, and people who should be designated as deviant or criminal. (48/0)

*CRJ:131 Criminal Law and Procedure 3 Credits
(Listed also as LGL:230) Prepares the student with the skills and competencies to understand criminal law and procedure and to assist a prosecuting attorney or a criminal defense attorney/public defender in the area of investigation and litigation. (48/0)

*CRJ:141 Criminal Investigation 3 Credits
Introduces the field of criminal investigations from the perspective of the various enforcement agencies within the Criminal justice arena including but not limited to the police officer, sheriff's officer, public defender-prosecuting attorneys' investigators, and other law enforcement-related persons. Provides an overview of the early beginnings of investigations to the current new age developments of crime-solving techniques. (48/0) Prerequisite for (AA) Criminal Justice students only: CRJ:100

*CRJ:200 Criminology 3 Credits
Introduces criminology theory and practice in a cross-cultural perspective as well as the causes and effects of crime, the theoretical explanations to crime and crime patterns, the social contexts of crime, issues faced in family violence, hate crimes, white-collar crimes, and human behaviors that affect crime and its consequences. (48/0)

*CRJ:201 Juvenile Delinquency 3 Credits
Introduces the conceptions, history, establishment, philosophies, and structure of the juvenile justice system. Reviews the system from the perspective of the courts, system support personnel, the juvenile and family members. Discusses the theoretical and practical workings of the juvenile justice system and the differences in the system vis-à-vis the adult criminal system. Provides insight into the protection of individual rights and the goals of prevention and treatment of the juvenile. (48/0) Prerequisite: CRJ:100

*CRJ:215 Spanish for Law Enforcement 3 Credits
Students learn Spanish phrases and questions necessary to carry out specific law enforcement protocols. Discussions include cross-cultural issues pertinent to relationships between non-Hispanic officers and the Hispanic community members. (40/16)

*CRJ:230 Evidence 3 Credits
(Also listed as LGL:270) Analyzes the area of evidence from the perspective of a participant in the criminal justice system. Introduces concepts concerning the criminal justice process, direct and circumstantial evidence, witness testimony, the hearsay rule and its exceptions, and obtaining evidence admissible in a court proceeding. Students learn about the legal, ethical and practical considerations involved in identifying and obtaining evidence and the rules concerning the use of evidence in a criminal justice context. (48/0)

CSC: Computer Science

CSC:108 Computer Careers 2 Credits
Familiarizes students with the job responsibilities and general characteristics of various career paths within the computer industry. (32/0)

Key:
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***Foundation-building (developmental) courses*
****Life Skills courses*

CSC:117 Computer Systems .5 Credit
An advanced data processing course designed to develop a more thorough understanding of the hardware-software interface which must exist for a computer system to function smoothly. Microprocessor technology and hardware interfaces are studied. (3/12) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: BCA:112, CIS:505, CIS:731

DEA: DENTAL ASSISTING

DEA:203 Applied Anatomy and Physiology 1.5 Credits
An introductory anatomy and physiology course geared to meet the needs of dental assisting students. (24/0)

DEA:250 Dental Science 4.5 Credits
Content in areas of dental anatomy, oral histology, dental health education, nutrition, microbiology, infection control, and hazards management. (56/32)

DEA:264 Dental Science II 3 Credits
Covers different medical and oral pathological conditions and manifestations, including prevention, etiology, physiology, and treatment. The pharmacology section provides information necessary to develop a basic understanding of drugs and their uses and misuses. (32/32) Prerequisites: A minimum grade of C- in DEA:203, DEA:250

DEA:311 Dental Radiography I 2 Credits
Presents background information in radiography and covers the uses of radiation in dentistry, characteristics of radiation, technical aspects of production, components and functions of dental x-ray machines, radiation safety, effects of exposure, film and film processing, landmarks and the interproximal examination. (16/32) Prerequisite must be passed with a minimum grade of C-. Pre-/corequisite: DEA:250

DEA:322 Dental Radiography II 3 Credits
Practical experience in exposing radiographs. Includes units of specialized techniques for children, edentulous patients, and extra-oral exposures. Students will not diagnosis conditions, but will learn to interpret the quality of radiographs and the general characteristics of normal and abnormal conditions. (16/64) Prerequisites: A minimum grade of C- in DEA:311, DEA:250

DEA:411 Dental Materials I 2 Credits
The basic principles of dental materials. Studies the physical and chemical composition plus function and manipulation of various dental materials. Allows students to perform individualized laboratory procedures, evaluation, and application of skills commonly utilized in the dental office. (16/32)

DEA:418 Dental Materials II 3 Credits
A continuation of Dental Materials I. Includes the study of physical and chemical composition plus function and manipulation of various dental materials. Students perform individualized laboratory procedures, evaluation, and application of skills commonly utilized in the dental office. (16/64) Prerequisites: A minimum grade of C- in DEA:250, DEA:411, DEA:510

DEA:510 Principles of Dental Assisting 6.5 Credits
Basic principles of chairside dental assisting including the care and identification of equipment and instruments and patient care. Presents basic fundamental assisting in routine procedures with the utilization of four-handed dentistry. Includes information on coronal polish, rubber dam, and moisture control. (88/32) Pre-/corequisite: DEA:250

DEA:560 Dental Clinic I 3 Credits
Practical experience in basic dental assisting procedures and exposure to patient management situations common to a general dental office. Students assist local dentists in the school clinic by carrying out necessary dental procedures on low-income patients referred by social service agencies. Includes all areas of the dental office, and students rotate on a routine schedule in each area while developing greater awareness of human dynamics. Students are assigned to local dental offices the last eight weeks of the semester to gain actual experience in chair-side assisting, laboratory procedure, and reception duties. One-hour weekly seminars are scheduled by the instructor. (16/0; 32 hours in-house clinic; 64 co-op hours in private dental offices) Prerequisites must be passed with a minimum grade of C-: COM:020, DEA:203, DEA:250, DEA:311, DEA:411, DEA:510. Pre-/corequisites: DEA:264, DEA:322, DEA:418, DEA:605

DEA:561 Dental Clinic II 4.5 Credits
Actual experience in chairside assisting, laboratory procedures, and reception duties in various dental offices. Dental assisting students gain experience in both specialty and general dental offices serving the public with quality dental care. Includes participation in a one-

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hour weekly seminar scheduled by the instructor. (8/0 and 256 co-op hours) Prerequisites must be passed with a minimum grade of C-: Prerequisites: DEA:264, DEA:322, DEA:418, DEA:560, DEA:605; and PSY:111 or PSY:112. Pre-/corequisite: DEA:703

DEA:605 Dental Specialties 4 Credits
Covers the dental specialties of endodontics, dental public health, periodontics, pediatric dentistry, oral surgery, orthodontics, fixed prosthodontics, and removable prosthodontics. (52/24) Prerequisites: A minimum grade of C- in DEA:250, DEA:510

DEA:703 Dental Office Procedures 3 Credits
Addresses the clerical duties of the dental office. Basic information includes sections on patient records, processing mail, telephone techniques, appointment control, recall systems, accounting procedures, bookkeeping procedures, business records, banking procedures, insurance, and inventory control by both manual and computer means. (44/8) Prerequisites: A minimum grade of C- in DEA:250, DEA:411, DEA:510, DEA:605

DRA: Film and Theatre

*DRA:112 American Film 3 Credits
An introductory course in film studies, surveying the American film industry as an art form, as an industry, and as a system of representation and communication. Explores how American film making works technically, aesthetically, and culturally to reinforce and challenge America's national self-image. (48/0) Prerequisites: ENG:105 with a minimum grade of C- or an equivalent composition course at another college or university with a minimum grade of C-

DSL: Diesel

DSL:353 Diesel Engine Principles 4 Credits
The historical development of the diesel engine. Theory of operation and designs of compression ignition engines, combustion chamber shapes, and cooling and lubrication systems are examined in the classroom. (24/80)

DSL:449 Diesel Support Systems 3 Credits
Introduces complete air intake systems including rotor-type air blowers, turbo chargers, super chargers, and external governors. Addresses the diagnosis and repair of fuel systems in diesel engines. Instruction covers components, fuel characteristics, and operations of various fuel systems of the major engine manufacturers. Provides background in understanding water temperature control, water circulation, heater cores, related test equipment, and general service procedures. (8/80)

DSL:533 Drive Trains 3 Credits
Students examine clutch construction and operation and also remove, inspect, repair, and replace clutch systems and adjust them. Includes the removal of all types of differentials and their inspection and repair including double reduction power dividers, their components, and rear axles. (8/80)

DSL:632 Brakes - Diesel 2 Credits
Information regarding hydraulic brakes, air brakes, parking brakes, reconditioning, and refinishing. (8/48)

DSL:733 Air Conditioning 3 Credits
Provides the principles and practical experience in working with air conditioning. Includes study of component units, their operation and repair, diagnostic procedures, and the use of the newest and finest equipment and techniques in evaluating and changing of the air conditioning system. (16/64)

DSL:803 Equipment Repair - General 6 Credits
Actual experience in working on many types of equipment. Training is coordinated with classroom instruction in a well-rounded package. Areas emphasized are: preventive maintenance, lubrication, adjustments, and general mechanics of all aspects of diesel-powered equipment. (0/172)

ECE: Early Childhood Education

ECE:109 Orientation to Center Participation 3-4 Credits
An overview of the history and philosophy of early childhood education. Includes the study of various types of programs (infant/toddler, preschool/day care, and

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school-age) including diversity and multi-cultural nonsexist curriculums, lesson design, special curriculum areas, organizational skills and resources, and current issues in early childhood education. Students participate in centers to observe, plan, and implement activities that correlate with curriculum areas being studied. (32/32-64)

ECE:126 School Age Care 3 Credits
Studies developmentally appropriate programs for the school-age child, focusing on before- and after-school care. Emphasizes development during the school-age years, the environment and curriculum for developmentally appropriate programs, and children's relationships with peers, families, and caregivers. Includes current issues, guidance of children's behavior, and activities for school-age children. (48/0)

ECE:133 Child Health, Safety, and Nutrition 3 Credits
Emphasizes the nutritional requirements and needs of young children; the interrelationship and importance of health, safety, and nutrition in early childhood programs; and how children can be actively involved in their own nutrition, safety, and health education. (48/0)

ECE:162 Curriculum: Creative Activities 4 Credits
Introduces a wide variety of art media and activities, songs, and musical experiences developmentally appropriate for young children. The value and importance of these enriching and creative experiences is emphasized. (64/0)

ECE:167 Curriculum: Science and Math 2 Credits
Presents activities in a developmental sequence designed to support young children's construction of concepts and skills essential to a basic understanding of science and mathematics. (32/0)

ECE:221 Infant/Toddler Care and Education 3 Credits
The growth and development of infants and toddlers and issues critical to their care. Emphasizes development, health and safety, developmentally appropriate practices, curriculum, and environments. Includes theoretical perspectives, trends in American families, infant/toddler programs, and research implication. (48/0)

ECE:249 Children's Literature 3 Credits
Presents the process of language acquisition, factors that influence language development, and familiarity with typical preschooler's speech. Acquaints students with various forms of children's literature and the selection of quality literature appropriate to the child's developmental level. Explores methods and techniques of expanding children's use of language. Gives opportunities to practice and develop storytelling abilities, to read a story to a group, and to utilize the flannel board and puppets. (48/0)

ECE:277 Early Childhood Field Experience I 2 Credits
Provides experience in an early childhood program in the surrounding communities. Students observe developmental characteristics of children, guidance and teaching strategies, and assist with activities and routine tasks. Frequent conferences are scheduled with cooperating teachers and/or early childhood faculty to discuss plans, presentations, and performances. (120 co-op hours) Prerequisites: A minimum grade of C- in ECE:109, ECE:162, ECE:249, and PSY:222

ECE:278 Early Childhood Field Experience II 3 Credits
Provides opportunities to work in early childhood programs. Students will begin to construct their personal philosophy of early childhood education and demonstrate growth in the performance of quality care giving. As students assume more responsibility, they will be encouraged to participate in a reflective process with cooperating teachers and early childhood faculty. (180 co-op hours) Pre-/corequisite: ECE:277

ECE:279 Early Childhood Field Experience III 6 Credits
An intensive full-time experience in a licensed early childhood program. Allows in-depth exploration of educational programs, children, and the administrative functions of a center, and represents the culminating experience for students in the early childhood program. (360 co-op hours) Prerequisites: ECE:277 and ECE:278 or instructor consent and/or corequisite ECE:278, ECE:946, or instructor consent

ECE:290 Early Childhood Program Administration 3 Credits
Studies the components necessary for successful administration of an early childhood program. Emphasis is on the development of a center, licensing and accreditations, financial matters, center organization, and evaluation. Includes current issues, administrative styles, and relationships with parents and community. (48/0)

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ECE:946 Seminar 3 Credits
Students and early childhood faculty review and discuss a variety of selected topics and activities pertaining to early childhood education. (48/0) Pre-/corequisite: ECE:279

ECN: Economics

*ECN:110 Introduction to Economics 3 Credits
Presents material that is both macroeconomic and microeconomic in nature. Primarily a survey course to introduce students to how our economic system works. (48/0)

*ECN:120 Principles of Macroeconomics 3 Credits
Presents material essential to an understanding of the economic forces at work in our global society: the market system, supply and demand, gross national product, gross domestic product, the banking system, fiscal and monetary policy, international trade, and various economic systems employed throughout the world. (48/0)

*ECN:130 Principles of Microeconomics 3 Credits
Presents material essential to an understanding of microeconomic theory and concepts: constrained maximization, scarcity, opportunity costs, marginal decision-making, indifference curve analysis, budget constraint analysis, production cost analysis, various market structures, roles each sector of our economy plays, and diverse economic problems that plague our economy. (48/0) Prerequisite: ECN:120

EDU: Education

*EDU:100 History of Community College 3 Credits
Focuses on the history of educational institutions in the U.S. identified as community colleges. History is traced back to the establishment of the first junior college in Joliet, IL, to the current time. Explores philosophy, mission, and purpose of community colleges as well as the various areas of a comprehensive community college. Discusses student population, college organization, faculty and staff and outcomes accountability. Course directs participants to explore elements of course content relative to the community college they are associated with as an authentic example. (48/0)

*EDU:110 Exploring Teaching 3 Credits
Introduces the teaching profession and field of education. Overviews the school as an institution of American society and gives a general history of U.S. education. Includes learning, curriculum, instruction in the (pre) K-12 system, current strategies and methods, assessment, and technology, as well as diversity, the complexity of diverse learners, educational legislation, and the role of teachers. Students will explore the foundation for becoming a reflective practitioner and will initiate professional portfolios based on national/state standards. (48/0)

*EDU:125 Making a Difference 3 Credits
(Also listed as HSV:160.) Introduces careers related to working with people with disabilities; this includes a special emphasis on the need of paraeducators in the classroom learning environment. Introduces special education, residential services, vocational services, recreational services, and other services for children and adults with disabilities along with an introduction to specific disabilities and human development. Covers professionalism, teamwork, instructional strategies, interventions, communications skills, and behavior management. Requires completion of service learning projects. (48/0)

*EDU:126 Observation and Management of Behavior 3 Credits
(Also listed as HSV:161.) Designed for paraeducators, this course places emphasis on the management of behavior in a classroom environment. Skills necessary to monitor and modify both individual and group behavior are developed. Includes strategies for self-management of behavior. (48/0)

*EDU:130 Home, School, and Community Relations 3 Credits
Studies the importance of collaborative efforts of the school, home, and community to the promotion of the children's healthy development. Research relating to parental involvement, impact of inclusion, and factors which place families at risk are examined. Explores attitudes, philosophies, and practical techniques useful in building relationships with families and communities.(48/0)

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*EDU:175 Introduction to Human Disabilities and Services 3 Credits
(Also listed as HSV:162) A comprehensive introduction to the study of people with special needs. Covers causes of disabilities, characteristics of persons with disabilities, intervention strategies, services provided for these populations, trends, future perspectives, and issues affecting people with special needs. (48/0)

*EDU:210 Foundations of Education 3 Credits
A basic historical, philosophical, and sociological orientation to the field of American education, including a study of contemporary issues and problems. (48/0)

*EDU:235 Children's Literature 3 Credits
Studies children's literature and its role in supporting literacy development. Acquaints students with a variety of authors, illustrators, and genres. Provides insight into the selection of and criteria for the evaluation of developmentally appropriate literature. Within children's literature, issues addressing diversity, richness of cultures, respect, contemporary and controversial issues and developmental appropriateness is explored. Presents emergent literacy and its importance in the early childhood years and literacy in the elementary and adolescent years. (48/0)

*EDU:243 Diverse Learners 3 Credits
Exploration of a variety of "differences" within diverse learners and factors of importance in effective interaction. Covers development of the "self," identity, and culture as factors in understanding oneself and others. Explores learning styles and related concepts. Utilizes Myers-Briggs Type Indicator and learning style preferences. Participants examine their own perceptions and utilize their community college student population and the associated community for authentic examples (48/0)

*EDU:282 Field Experience: Exploring Teaching 1 Credit
Explores the career of teaching through active observation and participation in an assigned classroom. Students may be called upon to assist classroom teachers with appropriate classroom tasks. (0/32) Pre-/corequisite: EDU:110

EGT: Engineering Technology

*EGT:108 Principles of Engineering 3 Credits
Provides understanding of the engineering/engineering technology field. Explores various technology systems and manufacturing processes to help students learn how engineers and technicians use math, science, and technology in an engineering problem-solving process to benefit people. Includes concerns about social and political consequences of technological change. (16/32)

*EGT:193 Introduction to Engineering Design 3 Credits
Teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software. (48/0)

ELE: Electrical Technology

ELE:107 Electrical Blueprint Reading3 Credits
Opportunity to learn how to read construction blueprints, prepare blueprints, plans, and specifications from a customer's description, and use these preparations in the construction field. Stresses principles of interpreting trade blueprints and reading of specifications basic to all aspects of the trades. Deals with types of line, development and arrangement of views, dimensioning practices, and invisible edges. Emphasizes design of commercial and residential structures. (48/0)

ELE:113 AC/DC Fundamentals 3 Credits
Introduces AC/DC theory, the concepts of electricity and its sources, basic circuits, schematics, Ohm's Law, troubleshooting, motors and generators, relays and switches, and electrical measurement devices. Combines lectures and labs to assist students in understanding these concepts. (32/32) Corequisite: MAT:063

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ELE:117 DC Theory 5 Credits
A comprehensive introduction to the principles of direct current electricity. Includes theory and theorems related to DC sources, resistive networks and circuits, power, and the relationship between voltage, current, and resistance. Practical laboratory experiences allow students to gain familiarity with sources, components, and basic measuring instruments as well as required laboratory safety practices. (40/80) Prerequisite: Qualifying placement score for MAT:102 or co-registration with MAT:063

ELE:118 AC Theory 5 Credits
A comprehensive introduction to alternating current electricity. Theorems studied in DC Theory are applied to resistance as well as capacitance, inductance, impedance, reactive power, and phase relationships. Vector analysis using both the polar and rectangular (ap) coordinate systems are applied extensively in this course. The caloratory activities provide practical insights into the subject matter. (40/80) Prerequisite: A minimum grade of C- in ELE:117

ELE:135 Electrical Installation 5 Credits
Studies up-to-date industrial and commercial electrical installations. Discusses topics such as service entrances, circuits, conductors, outlets, and remote control systems. (32/96) Prerequisites: A minimum grade of C- in ELE:118 and MAT:063. Pre-/corequisite: ELE:151

ELE:142 Electrical Materials Identification 1 Credit
Students will be required to identify electrical components used in electrical work and will become familiar with the tools and the materials frequently used in industry. (16/0)

ELE:146 Commercial-Residential Lab 6 Credits
Practical experience in using electrical tools, making electrical connections, and wiring remote control systems. Covers the installation of service equipment, grounds, conduit wiring, and non-metallic wiring in different types of buildings. (0/192) Prerequisite: ELE:135

ELE:147 Estimating 1 Credit
Introduces estimating. Student work will consist of doing a take-off from a set of plans, preparing a bid for submission to a contract opening, and ordering the materials needed for the job. (0/32) Prerequisite: ELE:107

ELE:148 Solid State Fundamentals 4 Credits
Introduces basic theory as well as the operation and industrial applications of solid-state electronic components in industrial applications. Includes numerous lab experiments using various types of test instruments. (32/64) Prerequisite: A minimum grade of C- in ELE:118

ELE:151 National Electrical Code I 3 Credits
An introduction to the National Electrical Code designed to help students become familiar with and to use the code book. (32/32) Prerequisites: ELE:117, ELE:142; A minimum grade of C- in ELE:118 and MAT:063

ELE:152 National Electrical Code II 3 Credits
The Code is studied in terms of its application to residential, industrial, and commercial service entrances; wiring systems; and special signaling systems or warning systems. (32/32) Prerequisite: ELE:151

ELE:171 Power Systems 4 Credits
Familiarization with current practices in the generation, transformation, and application of single- and poly-phase power systems. (64/0) Prerequisite: ELE:152

ELE:172 Fundamentals of Fluid Dynamics 3 Credits
Introduces hydraulic and pneumatic theory. Subject matter includes hydraulics, pneumatics, pressures, and power sources. (32/32) Prerequisite: MAT:063

ELE:193 Motor Repair 3 Credits
The principles of generators, motors, controllers, and transformers, and most types of motors, such as split phase, induction, and both manual and automatic types of controllers. Includes servicing of electric motors and controllers. (32/32) Prerequisite: A minimum grade of C- in ELE:118

ELE:196 Motor Control Principles 4 Credits
A thorough, practical study of electrical machine control related to circuit design, maintenance, and troubleshooting. Addresses the diversity of control devices and applications, examining both current practices and the continuing technological evolution of the control industry. Enhances understanding of basic control circuits by the step-by-step description of the sequence of operation for each circuit. (16/96) Prerequisites: ELE:135, ELE:151, and a minimum grade of C- in ELE:118

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ELE:200 Auto Electrical Systems 7 Credits
Information regarding theory and practice in the areas of basic electrical and electronic systems, including starting and charging systems, lighting systems, as well as instruments and accessories. (44/136) Prerequisite: AUT:110

ELE:220 Application of PLC's 6 Credits
Covers basic mathematical operations in binary, octal, hexadecimal, Boolean algebra, and logic. Covers the programming of counters, timers, sequencers, and math functions with an emphasis on programming and program design and practical application. (64/64) Prerequisite: ELE:196

ELT: ELECTRONICS

ELT:123 Programmable Logic Controllers 3 Credits
Studies the use of PLC systems in the design of automation equipment. Uses Rockwell-Automation RSLogix 500 software to Program Rockwell-Automations SLC 500 and MicroLogix series PLCs. (20/56) Prerequisite: ELT:310

ELT:145 Electrical Systems - Diesel 4 Credits
Presents procedures for reading and understanding wiring diagrams and understanding troubleshooting procedures and how to follow them, as well as the removal and replacement of switches, lighting systems, electric motors, and gauges. Includes study of basic electricity and magnetism, testing, repair, replacing starting and charging system components, series parallel switches, and 24 volt systems. (24/80)

ELT:306 Electronic Circuits 6 Credits
A study of semiconductor devices and their applications. Analytical and graphical techniques are used in applying diodes, bipolar transistors, and field-effect transistors. Studies design techniques for the proper application of linear circuits. (64/64) Prerequisites: ELE:117, ELE:118, MAT:063

ELT:310 Digital Circuits 4 Credits
Continues to cover digital circuits used as building blocks of modern digital systems, computer, and control circuits. Flip-flops and related devices are covered along with address and decoders. (32/64) Prerequisite: ELT:317

ELT:317 Digital Logic Circuits 2 Credits
A study of number systems and arithmetic in various bases. Includes truth tables, logic symbols, and basic functions including NOT, AND, NAND, OR, NOR, EX OR, and EX NOR, logic gates. Uses Boolean algebra and reduction techniques along with Karnaugh Maps. (12/40)

ELT:328 Digital Electronics 6 Credits
A comprehensive coverage of digital electronics. The digital principles apply not only to computers, but also to applications used in automobiles, communications, industrial automation, process control, and other areas. (64/64) Prerequisites: A minimum grade of C- in: CIS:125; and ELE:113 or ELE:118

ELT:373 DC Circuit Analysis 4 Credits
A study of mathematical theory applied to direct current circuits, placing emphasis on elementary principles of electric concepts and units, schematics, resistance, Ohm's Law, series and parallel circuits, conductors, and insulators. Uses industry standard test instruments during laboratory analysis of DC circuits. Basic algebraic equations are solved to analyze DC circuits. (32/64)

ELT:378 AC Circuit Analysis 4 Credits
The fundamental theories of alternating current. Theories are applied in various circuits and include laboratory experiments on power factor, sine wave analysis, resonant circuits, capacitance, inductance, Q of coils, magnetism, and resistance. (32/64) Prerequisite: ELT:373

ELT:390 Electrical Network and Circuit Analysis 4 Credits
Develops advanced skills in analyzing electronic circuits and networks. Studies an array of analysis tools including traditional methods as well as computer PSpice analysis procedures. Course expands significantly beyond fundamental analysis tools such as Thevenin's and Norton's Theorems and Kirchhoff's Laws. (48/32) Prerequisites: ELT:306, ELT:328, ELT:635, MAT:210

ELT:410 Electronic Communication Systems 4 Credits
A study of various electronic communications systems and circuits. Topics include oscillators, amplitude and frequency modulation, radio communications techniques, pulse and digital communications, antennas, and fiber optics. (32/64) Prerequisite: ELT:580

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ELT:413 Electronic Communication Circuits 4 Credits
An analysis of AM and FM communication systems including modulation, detection techniques, and associated circuitry. Introduces fundamentals of television broadcast. Presents fundamental transmission line theory and satellite communications. (48/32) Prerequisite: ELT:306

ELT:463 Laser and Fiber Optics 4 Credits
The study of laser technology includes the nature of light, the physics of light, characteristics of laser light, design, applications, accessories, and safety. Fiber optics includes an overview of the advantages of fiber optics, total internal reflections, types of fibers, dispersion, attenuation, numerical aperture, cables, sources and transmitters, detectors and receivers, and interconnections. (64/0) Prerequisite: MAT:063

ELT:530 Semiconductors 3 Credits
Focuses on semiconductors (active devices). Topics include composition, parameters, linear and non-linear characteristics, in-circuit action, amplifiers, rectifiers, and switching circuits. (20/56) Prerequisite: ELT:378

ELT:531 Advanced Semiconductors 3 Credits
Analyzes amplifier rectification, filtering, and regulation circuits. Amplifier circuits are divided into classes of operation, and DC and AC operating parameters are presented. Also studies SCR, DiAC, Triac, MOS FET, JFET, and CMOS devices. (20/56) Prerequisite: ELT:530

ELT:580 Microelectronic Circuits 4 Credits
Studies various applications of linear integrated circuits. Topics include the differential amplifier, inverting and non-inverting amplifiers, the integrator, filters, comparators, the phase locked loop, the 555 timer, A/D and D/A converters, and voltage regulators. (32/64) Prerequisite: ELT:531

ELT:613 Microprocessors 4 Credits
A study of the 8086 microprocessor. Includes the architecture, software, and interfacing of the microprocessor to a microcomputer system. (32/64) Prerequisite: ELT:310

ELT:630 Microprocessor/Interfacing 5 Credits
Introduces microprocessors and their applications. Topics include assembly language programming and microprocessor interfacing. Emphasizes troubleshooting microprocessor-based systems. (48/64) Prerequisite: ELT:328

ELT:635 Op-Amps and Linear Integrated Circuits 4 Credits
Analyzes circuits employing op-amps and linear integrated circuits and emphasizes applications of various circuit configurations as well as troubleshooting op-amps and linear integrated circuits. (64/32) Prerequisite: ELT:306

ELT:640 Test Instrument Application and Measurement Techniques 3 Credits
The opportunity to acquire skills related to the use, application, and evaluation of test instruments and the measurement process. A primary purpose is to provide opportunity for study and application beyond what is typically required in most laboratory activities. By doing so, students will be better prepared to enter the world of work as a qualified technician. (32/32) Prerequisites: ELT:306, ELT:328, ELT:635, MAT:210

ELT:715 Introduction to Automation Systems/Robotics 3 Credits
Develops comprehensive understanding of concepts that embody industrial robotics and automated systems. Material covers integration of the robot with the automated work cell. Emphasizes hardware, software, and programming that supports the implementation of automated work cells and manufacturing systems. (20/56) Prerequisite: ELT:123

ELT:717 Automated Processes and Robotics 5 Credits
Covers flexible automation systems including electronic, computer, mechanical, electrical, and fluid drive components. Programmable controllers, robotics, diagnostics, troubleshooting, and system design are included with an emphasis on “hands-on” application as well as theory. (48/64) Prerequisites: ELT:630, ELT:635

EMS: EMERGENCY MEDICAL SERVICES

EMS:212 Emergency Medical Technician - Basic 7 Credits
Teaches the skills necessary for individuals to provide emergency medical care at a basic life support level with an ambulance service or other specialized service. Students must be at least 17 years of age prior to

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enrolling. (64/58 with 40 clinical and 24 field experience hours)

EMS:309 Emergency Medical Technician - Intermediate 3 Credits
Teaches advanced level skills in patient care both pre-hospital and during transit to an emergency care center. All advanced skills training and services are performed under medical direction. After successful course completion, students are eligible to take the National Registry Exam for certification. (24/24 with 48 hours field experience/co-op) Prerequisite: EMS:212

EMS:430 Emergency Medical Technician - Iowa Paramedic I 7 Credits
Teaches the cognitive, affective, and psychomotor skills necessary to provide competent pre-hospital advanced emergency care under the direction of a physician or designee in the field or during transit to an emergency care center. The focus is on pre-hospital environment, preparation, and trauma. Includes preparation in Pre-Hospital Trauma Life Support (PHTLS) and Advanced Cardiac Life Support (ACLS). (80/64) Prerequisite: EMS:212

EMS:435 Emergency Medical Technician - Iowa Paramedic II 9 Credits
Teaches skills necessary to intervene into the pathological process of advanced pre-hospital level of care under the direction of physicians in the field or during transit to an emergency care center. The focus is on specialty areas, i.e., medical, OB/GYN, etc. (48/40 with 110 clinical hours and 138 hours field experience) Prerequisite: A minimum grade of C- in EMS:430

EMS:815 Advanced Pediatric Life Support 1 Credit
Teaches cognitive, affective, and psychomotor skills necessary to provide competent advanced emergency care to neonates and pediatric patients under the direction of a physician or designee in the field or during transit to an emergency care center. The focus is on the pre-hospital environment. (12/12) Prerequisite: A minimum grade of C- in EMS:435

EMS:860 Iowa Paramedic Comprehensive Review 1.5 Credits
Review of cognitive, affective, and psychomotor skills necessary for an individual to provide competent pre-hospital advanced emergency care under the direction of a physician or designee in the field or during a transit to an emergency care center. (8/32) Prerequisite: A minimum grade of C- in EMS:435

ENG: ENGLISH COMPOSITION

**ENG:013 Basic Writing 3 Credits
An opportunity to develop and improve written communication skills. Reviews and applies principles of grammar and rules of punctuation, capitalization, usage, and use of numbers. (32/32)

**ENG:021 Foundations of Writing 3 Credits
A writing course that develops fluency and confidence in communication and clarity in thinking through writer's notebooks, expository writing, analytical reading, and listening. Structured assignments are used to explore personal goals and values, exercising skills needed for reasoning and writing across the curriculum. (48/0) Prerequisite: Qualifying placement scores or a minimum grade of C- in ENG:045 or ESL:101

**ENG:045 Communication through Reading and Writing I 3 Credits
Developed for students who have experienced difficulty in reading, writing, and study skills. Prepares students for more advanced Communication classes and for higher level college course work. (48/0)

*ENG:105 Composition I 3 Credits
Preparation for the types of communication and thought essential to academic and working-world success. The course focuses on writing as a process and is intended to help students identify and refine their own personal writing. (48/0) Prerequisite: Qualifying placement score or a minimum grade of C- in ENG:021

*ENG:106 Composition II 3 Credits
A writing course that focuses on writing as a process with emphasis on persuasion, evaluation, analysis, investigation, and research and documentation of sources. (48/0) Prerequisite: A minimum grade of C- in ENG:105 or an equivalent college-level course in composition

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*ENG:108 Composition II: Technical Writing 3 Credits
Designed to improve skills in writing abstracts of technical material, business letters, and memos common in manufacturing and technology, technical reports, and sets of instructions. Student writing will follow business procedures and be based on background knowledge and research. Prepares students to present technical reports orally to small audiences. (48/0) Prerequisite: A minimum grade of C- in ENG:105 or an equivalent college-level course in composition with a minimum grade of C-

*ENG:221 Creative Writing 3 Credits
Studies the craft of writing both through practicing various writing techniques and through reading and discussing examples of works by prominent writers. Students read and critique each other's original work and compile a portfolio of their stories and poems. (48/0) Prerequisites: A minimum grade of C- in ENG:105 or equivalent college-level courses in composition with a minimum grade of C-

ENV: Environmental Science

*ENV:115 Environmental Science 3 Credits
Studies the biological basis of environmental science and human influence on biosphere dynamics. Emphasis on scientific principles, inter-relationships among resources, pollution and environmental degradation, soil and water conservation, and the impact that politics, economics, ethics, and world view have on the future direction for life on the planet. (48/0)

*ENV:116 Environmental Science Lab 1 Credit
Laboratory experience that supports and applies basic concepts of resource management, soil and water conservation, general ecological dynamics, and scientific principles to the inter-relationships among resources, the environment, and human interactions. (0/32) Prerequisite: ENV:115

*ENV:140 Natural Resource Conservation 4 Credits
The general principles of natural resource conservation with an emphasis on local conservation organizations, indigenous resources, and typical management activities. Special consideration is given to environmental preservation, recreational functions, conflicting utilization policies, and employment opportunities in natural resource conservation and management. (48/32)

ESL: Non-Intensive ESL

**ESL:101 English as a Second Language for Academic Purposes 2 Credits
Designed for advanced English as a second language learners who are also enrolled in transferable college courses. It is intended to strengthen reading, writing, listening, and speaking skills, with the integration of contextualized grammar study in each skill area for academic and special purposes. Course may be repeated as needed. (32/0) Prerequisites: Accuplacer Placement scores, an Oral Proficiency Interview, a writing sample, and instructor approval.

FIN: Finance

*FIN:101 Principles of Banking 3 Credits
Examines nearly every aspect of banking providing a comprehensive introduction to the diversified services offered by the banking industry today. (48/0)

*FIN:110 Money and Banking 3 Credits
Introduces the overall financial arena and its structure, and offers pertinent information concerning present day monetary procedures as well as instruction in banking and credit procedures and calculations. (48/0)

*FIN:122 Personal Finance 4 Credits
An overview of personal and family financial planning emphasizing personal financial record keeping, planning spending, tax planning, consumer credit, making buying decisions, purchasing insurance, selecting investments, and retirement and estate planning. (64/0)

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FIR: Fire Science

FIR:115 Making a Difference: The Fire Officer's Role 3 Credits
Comprised of modules that include instructional videotapes, students are led through a series of class presentations. Workbooks are used for reading assignments and activity exercises on course topics. (48/0)

FIR:125 Fire Behavior and Building Design 3 Credits
Information on fire behavior and fire fighting tactics in relation to building design and construction. Through lecture, group discussion, and scenarios students will be able to base fire fighting considerations on awareness of building types and expected design features. (48/0)

FIR:130 Fundamentals of Fire Prevention 3 Credits
Basic knowledge of conducting fire code inspections for residential, commercial, industrial, and public assembly facilities. Upon completion, students will have the ability to recognize state and local fire code violations with a follow-up of proper documentation procedures and filing of violation. Also introduces fire prevention topics for students to be able to apply in their community. (48/0)

FIR:150 Fire Detection and Suppression Systems 3 Credits
Information relating to emergency response to building fires. Through lecture, tours, and group project participation, students will be able to identify various types of fire detection and alarm systems and their functions and limitations. (48/0)

FIR:180 Chemistry of Hazardous Materials 3 Credits
Information on emergency responses involving hazardous materials. Through lectures, case studies and group participation, students identify and learn to stabilize hazardous material incidents. (48/0)

FIR:183 Hazardous Materials Management 3 Credits
Information on emergency response to hazardous materials incidents. Through lectures and group scenarios, students will be able to identify hazardous materials and manage emergency incidents. (48/0)

FIR:280 Instructional Techniques for Fire Service Training 3 Credits
Examines and implements the information and techniques necessary to meet the challenges facing fire service instructors. (48/0)

FLS: Foreign Language – Spanish

*FLS:141 Elementary Spanish I 4 Credits
This first-year Spanish course emphasizes the four language skills—speaking, listening, reading, and writing—in a communicative approach to language learning. Includes lessons pertaining to Hispanic cultures. (64/16)

*FLS:142 Elementary Spanish II 4 Credits
Reviews lessons learned in Beginning Spanish I and provides instruction in more complex and detailed components of Spanish grammar. Emphasizes the four language skills—speaking, listening, reading and writing—in a communicative approach to language learning. Includes lessons pertaining to Hispanic cultures. (64/16) Prerequisite: Successfully completed FLS:141 or equivalent course or two years of formal secondary instruction

*FLS:241 Intermediate Spanish I 4 Credits
This third semester course provides a review and synthesis of grammatical structures learned in first-year Spanish while simultaneously emphasizing the development of communicative skills in both the oral and written language. Classes are conducted in Spanish. (64/0) Prerequisites: Successful completion of two years of high school Spanish or one year of college Spanish, or FLS:141 and FLS:142, or successful performance on an entrance proficiency examination.

*FLS:242 Intermediate Spanish II 4 Credits
This fourth semester course provides a review and synthesis of grammatical structures learned in first-year and first level intermediate Spanish while simultaneously emphasizing the development of communicative skills in both the oral and written language. Classes are conducted in Spanish. (64/0) Prerequisites: Successful completion of three years of high school Spanish or three semesters of college Spanish (FLS:141, FLS:142, FLS:241) or successful performance on an entrance proficiency examination, e.g. CLEP

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GEO: GEOGRAPHY

*GEO:121 World Regional Geography 3 Credits
Introduces a geographic perspective of the world through its physical and human foundations. Studies the world's major geographic realms with emphasis on the unique interplay between cultural landscapes, environmental interactions, historical activities, economic factors, and physical attributes. (48/0)

GRA: GRAPHIC COMMUNICATIONS

GRA:109 History of Graphic Design 2 Credits
Surveys the vast history of graphic design through exploration of the influences shaping the look and meaning of visual communications from prehistory up to the present. Explores the tools, materials, processes and mechanizations in tandem with societal and personal ideologies and events in terms of their impact on graphic design. (32/0)

GRA:110 Graphic Arts Principles 3 Credits
Introduces fundamental principles and elements of design. Analytical and creative thinking skills are applied and strengthened through explorative and conceptual innovative problem-solution design exercises. Class critiques and discussions encourage use of technical design terminology and nurture understanding of how to effectively communicate ideas through visual media. Employs traditional art tools and materials emphasizing hand-construction skills (32/32)

GRA:113 Electronic Prepress and Printing 2 Credits
Introduces processes , procedures, tools, materials, equipment, and terminology involved in printing production, and where and how the graphic designer functions as a member of this exciting, challenging team process. A variety of printing and publishing businesses will be toured to compare different printing processes, procedures, and techniques firsthand. Procedural and analytical thinking skills are nurtured through hands-on projects and discussions. (8/48) Prerequisite: A minimum grade of C- in GRA:120 or GRA:143 or GRA:179

GRA:120 Illustrator 2 Credits
Students learn and practice the many tools, techniques, and capabilities of Adobe Illustrator through creation of graphic illustrations. Covers vocabulary and navigation specific to an object-based drawing program. (8/48) Prerequisite: BCA:112 or BCA:212

GRA:122 Graphic Illustration Tools 3 Credits
Explores illustration: the process, types, subject matters, careers, and variety of tools and materials available to the illustrator. A variety of illustration projects will be completed with the materials and tools commonly used by illustrators. Constructive critique sessions utilizing design terminology combined with discussion of assignment parameters will be used to review illustration work. (16/64) Prerequisite: A minimum grade of C- in ART:120 or ART:133

GRA:143 Photoshop I 2 Credits
Practical knowledge regarding basic operating issues with Adobe PhotoShop. Directed practice focuses on learning tools, menus, palettes, processes, and filters involved with simple to moderate image manipulation using PhotoShop. (8/48) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: BCA:112 or BCA:212

GRA:148 Photoshop II 2 Credits
Focuses on hands-on use of Adobe PhotoShop. Students gain extensive knowledge of image manipulation in a digital world. Photoshop is used to manipulate and create many effects a professional will need to use in the real world. (8/48) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: GRA:143

GRA:151 Web Design 3 Credits
Introduces the basics of Web page creation and maintenance. Uses the hypertext markup language in creating Web pages. Stresses good screen layout and design principles. Explores enhancements and extensions of HTML as well as the incorporation of scripting in creating Web pages. Focuses on planning and designing Websites that are attractive and easily navigated. Taught with emphasis on the client when developing Websites. (24/48)

GRA:157 Working with Web Tools 2 Credits
Focuses on selection and proper use of some of the various tools that are available to aid Web designers in developing and maintaining Website materials. (4/56) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:212

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GRA:158 Web Multimedia 3 Credits
Focuses on the creation of Web animations and practical knowledge in basic video capturing, editing, and creation for presentations, videos, CDs/DVDs, and the Web. Offers practical knowledge of Web image animation and how to capture video for different formats, edit video, convert it for use in different platforms, and burn it to CD or DVD. Uses popular software to create and manipulate images and explores various video and audio formats including streaming video. (24/48) Prerequisites must be passed with a minimum for a C- to progress in the Computer Analyst major. Prerequisite: GRA:151. Pre-/corequisite: GRA:143

GRA:159 Working with Web Audio/Video 1.5 Credits
Practical knowledge regarding basic video capturing, editing, and how to create it for presentations, video CDs, and the Web. Covers various video formats including VCD, SVCD, MPEG-2, AVI, and streaming video. Students learn how to capture video for different formats, edit the video, convert it for use in different platforms, and burn it to CD. (8/32)) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: BCA:212, CIS:205, GRA:220

GRA:168 Creating Web Graphics 2 Credits
Creation of graphics for Web page use. Introduces the types of graphics that Web graphic artists and designers produce and techniques used to create and alter images. Students create Web graphics specific to the intended audience of each particular Web page. (8/48) Corequisite: CIS:207

GRA:169 Working with Web Animation 1 Credit
Focuses on the creation of vector and GIF animations. Students gain practical knowledge of image animation for the Web. Uses Macromedia Flash to create and manipulate images and Web pages. (4/24) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:205, GRA:220

GRA:173 Typography 3 Credits
Explores the many facets of typography, its definition, history, function, structure layout and design. Introduces the traditional rules governing typographic usage, selection of an appropriate typeface, setting professional-level type using the computer, and applying type expressively to enhance visual communications. Class critiques and discussions encourage use of technical typographic terminology along with conceptual and analytical thinking skills. (32/32) Prerequisite: A minimum grade of C-in GRA:179

GRA:179 Publication Software 3 Credits
An overview of publication design concepts through hands-on exercises. Covers basic word processing and typographical conventions, page layout elements that streamline production, advanced procedures when working with boxes and procedures for creating or formatting long documents. (16/64) Prerequisite: A minimum grade of C- in BCA:112 or BCA:212

GRA:180 Graphic Layout and Design I 3 Credits
Covers basic design concepts and color principles for visual communication. Conceptual and analytical thinking skills are applied through a series of design projects and discussions. Presents introductory principles of typographic composition, structure and hierarchy, and the basics of design. Explores visual elements to communicate ideas. (32/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: CIS:120

GRA:181 Graphic Layout and Design II 3 Credits
Explores components of graphic design and how page architecture, design process, design history, principles and elements, typography, illustration, photography, and printing process are applied in creating a graphic design. Using theories of visual communication and design terminology, design solutions are reviewed to discuss why some solutions are more effective than others. Conceptual and analytical thinking skills are nurtured through a series of complex design projects and discussions. (24/48) Prerequisites: A minimum grade of C- in GRA:143, GRA:179, GRA:180

GRA:182 Graphic Layout and Design III 3 Credits
Advanced design challenges utilizing skills, concepts, processes, tools, materials, elements, and principles learned in Graphic Layout and Design I and II. Design skills, conceptual and analytical thinking are applied through a series of design projects and discussions. Explores careers in graphic design and students will create personal professional identifiers to enable them to compete in the graphic design job market. (16/64) Prerequisites: A minimum grade of a C- in GRA:148, GRA:181

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GRA:210 Graphic Layout and Design 3 Credits
Strengthens ability to apply elements and principles of design while working as a graphic artist. Students learn and practice production skills: computer layout, scanning, sizing, tonal correcting, proofing. Assignments mimic entry-level design projects: following specs, design from customer info/sketches, thumbnail layouts, layout variations, simultaneous work on multiple projects. Introduces visual communication theories. Uses critique sessions to strengthen ability to talk about design. (24/48) Prerequisites: A minimum grade of C- in GRA:110, GRA:143, GRA:179

GRA:220 Graphic Files .5 Credit
Practical knowledge regarding various file formats for graphic files. Discussion focuses on compatibility issues of using graphic files with various software products and on compression and storage issues as they relate to graphic files. (4/8)

GRA:230 Exploring Photography 2 Credits
Explores photography processes, equipment, operations, history, vocabulary, applications. Though traditional photographic processes and camera operations will be experienced, the majority of the semester will be spent learning and working with digital process and equipment. Emphasizes purpose of photography, critical view of photographs, taking more effective photos using elements and principles of design, and professional presentation of photographs. Students will participate in critiques employing design and photographic terminology as guidelines for discussion on why some photos may seem be more effective than others. Emphasizes use of photos as expression of creative communication and storytelling. (8/48) Prerequisite: A minimum grade of C- in BCA:112 or BCA:212 or CIS:120

GRA:260 Issues in Media Communications 2 Credits
Necessary skills are developed to critically analyze and discuss items in the media in terms of their ethical content. Time-honored and contemporary ethical philosophies in conjunction with the "Potter Box" model are employed to identify the values, principles and loyalties of an issue and reinforce personal opinion. Explores pertinent legal and ownership issues encountered in media communications (copyright, patent, trademark, public domain, fair use). (32/0)

GRA:310 Advanced Graphic Layout and Design 3 Credits
Utilizes and strengthens creativity; conceptual, developmental and problem-solving capabilities; application of design process; technical competencies in complex examples of visual communication. Encourages balance between form and function and incorporation of visual communication theory into designed projects. Critique sessions strengthen ability to identify effective design qualities. Opportunity to talk with design professionals about their experiences. (16/64) Prerequisites: A minimum grade of C- in GRA:148, GRA:210

GRA:800 Graphic Design Portfolio Seminar 3 Credits
Students design a self-promotion identity system and portfolio (print and digital), for the purpose of obtaining work as a graphic designer. They will practice interviewing skills, meet industry design professionals and explore graphic design employment opportunities and resources. (16/64) Prerequisite must be passed with a minimum grade of C-. Pre-/corequisite: GRA:310

GRA:805 Graphic Design Occupational Experience 3 Credits
Course places students in professional graphic design/art production settings to learn processes and procedures utilized by their cooperating businesses for approximately 10 hours a week for a semester. Students will journal their on-the-job experiences and meet every few weeks to discuss and share the work they have been doing. (192 co-op hours) Prerequisite: Instructor consent

HCR: Heating and Air Conditioning

HCR:108 Heating and Air Conditioning Trade Codes 2 Credits
An initial portion of this course teaches how to use the Uniform Mechanical Code Manual properly. A general study of the codes necessary for installation of heating equipment, ventilating equipment, and fuel-gas piping is emphasized. (32/0)

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HCR:117 Introduction to Forced Air Heat 2 Credits
The theory, wiring, electrical controls, and operations of a basic gas, forced-air furnace. (16/32) Prerequisite: HCR:403

HCR:122 Gas Furnaces 5 Credits
Provides a working knowledge of electrical controls, gas piping, troubleshooting, and maintenance on conventional and high efficient gas-fired furnaces. (16/128) Prerequisites: HCR:117, HCR:403

HCR:123 Oil Furnaces 2 Credits
Provides a working knowledge of electrical controls, troubleshooting, and maintenance on oil-fired furnaces. (8/48) Prerequisites: HCR:117, HCR:403

HCR:124 Hydronic Heat 1 Credit
Instruction in wiring, electrical controls, and the operation of a hydronic heating system. (8/16) Prerequisite: HCR:403

HCR:128 Principles of Electric Heat 2 Credits
Provides a working knowledge of electrical controls, troubleshooting, and maintenance procedures on an electrical heating system. (8/48) Prerequisites: HCR:117, HCR:403

HCR:141 Principles of Heat Pumps 3 Credits
Provides background about electrical controls, sealed system components, troubleshooting, maintenance, and setting balance points on a heat pump system. (16/64) Prerequisites: HCR:117, HCR:403

HCR:202 Introduction to Cooling 3 Credits
Instruction in the theory, wiring, electrical controls, and the operation of an air conditioning system. (16/64) Prerequisite: HCR:403

HCR:204 Principles of Air Conditioning 4 Credits
Provides a working knowledge of electrical controls, sealed system components, troubleshooting, and maintenance procedures on air conditioners. (16/96) Prerequisites: HCR:202, HCR:403

HCR:403 Basic Electricity 4 Credits
Presents the importance of safety with electrical equipment, techniques used for splicing, soldering methods, types of electrical circuits, how the flow of electric current affects magnetism, transformers and motors, the use of various motors, and means of circuit protection. (24/80)

HCR:506 Air Distribution 3 Credits
Covers understanding of heat loss and gain for determining proper size and/or cooling equipment needed for specific residential applications, and also the principles of psychrometrics as to the effects of a structure's relative humidity and its effect on the structure's circulated air. (16/64)

HCR:515 Sheet Metal Fabrication 3 Credits
Provides working knowledge in layout, fabrication, and installation of duct systems used in the heating and cooling industry. (0/96)

HCR:815 Air Purification and Humidity 2 Credits
Provides an understanding of why air purification and proper humidity control are important for personal comfort. (8/48)

HCR:941 Practicum 1.5 Credits
An opportunity to continue study in an area of the student's choosing, including credit through field experience. Suggested areas include gas heat, oil heat, air conditioning, basic electricity, or sheet metal. Individual students will be required to develop objectives they wish to accomplish. (0/48) Prerequisite: HCR:122 or HCR:123 or HCR:204 or HCR:515

HEQ: Heavy Equipment

HEQ:153 Hydraulic Systems 2 Credits
A study of hydraulic systems employed on heavy equipment with emphasis placed upon maintenance procedures in addition to establishing an understanding of basic principles and concepts. (8/48)

HIS: History

*HIS:131 World Civilization I 3 Credits
A survey course in world civilization from pre-history to 1500 which examines four major civilizations: Middle East, Indian, Chinese, and European. The civilization components of religion, philosophy, art, and architecture are integrated with the political history of the Middle East, India, China, Africa, and Europe. (48/0)

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*HIS:132 World Civilization II 3 Credits
A survey course in world civilization from 1500 to modern times examining the four major civilizations: Middle East, Indian, Chinese, and European. Focuses on the emergence of modern civilization including the Age of Discovery, the Protestant Reformation, Age of Enlightenment, and the rise of modern cultures in Asia, Europe, Africa, and the Americas. Covers the rise of nationalism, industrialization, colonialism, liberalism, democracy, socialism, and the great changes brought about by the World Wars, the Great Depression, fascism, communism, the end of colonialism, and the Cold War's end. (48/0)

*HIS:151 U.S. History to 1877 3 Credits
A survey of the emergence of the United States from the colonial era to 1877 including colonization, the Revolutionary period, the early Republic, the Jacksonian era, the Civil War, and Reconstruction. Political, economic, and social themes will be considered. (48/0)

*HIS:152 U.S. History Since 1877 3 Credits
A survey of American life from 1877 to the present including the Age of Industrialism, the Progressive Era, World War I, developments between the wars, World War II, and postwar foreign and domestic issues. (48/0)

*HIS:214 Russian History and Culture 3 Credits
(Also listed as CLS:170) Acquaints students with major developments in Russian history and culture from all recorded periods beginning with Kievan Rus' to Yeltsin's era in the 1990's. Special emphasis includes the ordinary life of common people that will enrich an understanding of Russian history and culture. The course goal is to introduce students to the way Russians have related to their history and cultural heritage while broadening student language and critical thinking skills through reading, listening, speaking, and writing. (48/0)

*HIS:247 Study Abroad: British Life and Culture 3 Credits
Introduces aspects of the British people and their culture, including: the monarchy and Britain's royal family, the class system and history of London, Parliament and the political spectrum, women as a political issue, Britain and Ireland, the Common Market, education in Britain, the Church of England, popular cultures, the British theatre, the press, the pub, and guided tours of historic and cultural sites including the houses of Parliament. (48/0)

*HIS:248 Study Abroad: History of Cambridge, England 3 Credits
A survey course introducing the history and culture of the city of Cambridge. Intended to broaden understanding and appreciation for the experience of living and studying in Cambridge. (48/0)

HIT: Health Information Technology

HIT:121 Pharmacology 2 Credits
Basic pharmacological terminology and concepts, drug categories, mechanisms of drug actions, drug forms, routes of administration, and common generic and proprietary (trade) name medications. (32/0)
Prerequisite: A minimum grade of C- in HIT:140

HIT:140 Medical Terminology 4 Credits
The study of medical terminology as the language of medicine with emphasis on word analysis, construction of definitions, pronunciation and spelling of medical terms. (64/0)

HIT:165 Principles of Diseases 4 Credits
A focus of essential concepts of disease processes in relationship to the etiology, pathogenesis, pathology, and treatment of human diseases. (64/0) Prerequisites: A minimum grade of C- in BIO:157 or BIO:165; and HIT:140, HIT:320

HIT:215 Introduction to CPT 2 Credits
Introduces the use of the CPT classification system with emphasis on coding in the physician's office for reimbursement purposes. (24/16) Prerequisites: HIT:140, HIT:320; and BIO:157 or BIO:165. Pre-/corequisites: HIT:165; and BIO:165 or BIO:170

HIT:230 Introduction to Medical Coding 3 Credits
Introduces the ICD-9-CM classification system with application using coding scenarios. (32/32) Prerequisites must be passed with a minimum grade of C-. Prerequisites: HIT:140, HIT:320, HIT:330; and BIO:157 or BIO:165. Corequisites: HIT:165; and BIO:165 or BIO:170

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HIT:240 Advanced Coding and Classification 3 Credits
Advanced components of the ICD-9-CM coding in the health care systems. (32/32) Prerequisites: A minimum grade of C- in HIT:165, HIT:230, HIT:540

HIT:280 CPT-4 Coding 3 Credits
Includes principles of Health Care Procedural Classification System Coding (CPT-4) as well as advanced case study applications. (32/32) Prerequisites: A minimum grade of C- in HIT:165, HIT:230. Corequisites: HIT:240, HIT:292

HIT:292 Reimbursement Methodologies 2 Credits
Examines health care reimbursement coding classification systems, coding compliance, auditing, and classification systems. Introduces reimbursement methodologies in inpatient and outpatient settings. Explores billing related to charge description master maintenance, claims submission and review, and regulatory monitors. Introduces billing procedures and requirements for the CMS-1500 and UB-92 claims submission forms. (24/16) Prerequisites: A minimum grade of C- in HIT:230, HIT:540. Corequisites: HIT:240, HIT:280

HIT:320 Health Records Management 2 Credits
Explores the role of the health information professional in the management of health records. Introduces principles of health data purpose, content and structure, numbering and filing systems, storage and retention methods, forms construction and design, primary/ secondary records, and indexes and registers. Examines purpose of accreditation and regulatory standards in development of health record practice guidelines and the evolving role of computerized applications. (16/32)

HIT:330 Health Care Delivery Systems 2 Credits
Introduces professions in health information and the role served in the delivery of health care services. Explores health care delivery methods, types of organizations and providers, allied professions, regulatory control, and financing. Introduces the impact of technological changes and governmental regulations in the formulation of maintenance of health information. (32/0)

HIT:340 Comparative Records 2 Credits
Examines the regulations, data sets, and documentation requirements in comparative health records. Includes long-term care, home health, hospice, mental health, substance abuse, rehabilitation, and other settings in relation to information management requirements. (32/0) Prerequisites: A minimum grade of C- in HIT:320, HIT:330, HIT:540

HIT:351 Health Information Systems 2 Credits
Explores concepts of computer technology related to health care for the collection, storage, and retrieval of health care data, and software applications utilized in the delivery of health information services. (24/16) Prerequisites: A minimum grade of C- in BCA:212, HIT:320, HIT:330, HIT:540. Corequisites: HIT:240, HIT:292

HIT:420 Legal Aspects of Health Information 2 Credits
A study of the American legal system and the health record in relation to legal proceedings, release of information, consent, and confidentiality. (32/0) Prerequisites: A minimum grade of C- in HIT:320, HIT:330

HIT:445 Quality Management of Organizational Resources 4 Credits
Emphasizes performance improvement in health care settings and health information professional's role in quality improvement, utilization management, credentialing, and risk management. Includes simulation of quality assessment and utilization functions, impact of accreditation status, and the role of quality improvement. Reviews organization of functions, budgeting, policy creation, and personnel management. (48/32) Prerequisites: A minimum grade of C- in HIT:240, HIT:280, HIT:290, HIT:351, HIT:540

HIT:450 Health Statistics 2 Credits
Interpretation of health care statistics. Introduction to Institutional Review Board policies and processes in health care research. (28/8) Prerequisite: A minimum grade of C- in HIT:540; and qualifying placement scores or MAT:041 or MAT:053

HIT:540 Professional Practice Experience I 1.5 Credits
Supervised professional practice experiences that enable students to apply theory from health information coursework in relation to health record analysis, retention, retrieval, and processing guidelines as

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applied in the health care environment. (96 co-op hours) Prerequisites: A minimum grade of C- in BIO:165, HIT:140, HIT:320, HIT:330. Corequisites: HIT:420, HIT:230

HIT:541 Professional Practice Experience II 3 Credits
Supervised occupational experiences in a cooperating agency providing application of advanced classroom theory. (192 co-op hours) Prerequisites: A minimum grade of C- in HIT:240, HIT:280, HIT:292, HIT:351, HIT:540. Corequisites: HIT:340, HIT:445, HIT:450

HIT:603 Medical Transcription 4 Credits
Transcription of medical reports utilized in health care facilities. (32/64) Prerequisites: A minimum grade of C- in ADM:116, HIT:140, HIT:320 or dean approval. Pre-/corequisite: BIO:157 or BIO:165

HIT:946 Seminar 2 Credits
Capstone course emphasizing professional development activities in preparation for future employment. (16/32) Prerequisite: A minimum grade of C- in HIT:540. Corequisite: HIT:541

HSC: Health Sciences

HSC:104 Introduction to Health Care 2 Credits
Orientation to the institutions that make up our health care system and the ethical, legal, and safety issues influencing and regulating health practice and maintenance. Emphasizes need for communication and teamwork as well as technical skills necessary in the health care workforce. (32/0)

HSC:108 Introduction to Health Professions 2 Credits
Exploration of health career pathways in therapeutic, diagnostic, health informatics, and support services. Emphasizes need for communication and teamwork as well as technical skills necessary in the health care workforce. (32/0)

HSC:117 Basic Medical Terminology 2.5 Credits
The study of medical terminology as the language of medicine with emphasis on word analysis, construction of definitions, pronunciation and spelling of medical terms. (40/0)

***HSC:131 Heartsaver First Aid and Health Care Provider CPR/AED .5 Credit
Designed to teach adult, infant, and child CPR skills along with the use of the automatic External Defibrillator (AED), and obstructed airway/airway management. For future and present health care workers. (According to the American Heart Association.) (6/4)

***HSC:133 First Aid/CPR .5 Credit
Heartsaver First Aid with CPR, AED, and pediatrics targets lay responders including employees in the workplace. Responders are trained in use of adult and pediatric CPR with barrier devices, FBAO, automated external defibrillator in adults and children and includes content and learning activities for assessing victims and providing care for a variety of injuries and sudden illnesses according to the American Heart Association (AHA) guidelines. (7/2)

***HSC:135 First Aid .5 Credit
Heartsaver First Aid is designed to teach the skills to care for injuries and how to handle emergencies when assistance is not readily available. (8/0)

HSC:136 Advanced Life Support ACLS/PALS 1.5 Credit
Provides minimal cognitive and psychomotor skills of pediatric and adult emergency care. (8/32)

***HSC:172 Nurse Aide 3 Credits
This 75-hour course meets the training of The Omnibus Budget Reconciliation Act of 1987 (OBRA) for aides working in nursing facilities (NF) and skilled nursing facilities (SNF). Emphasizes the achieving of a basic level of knowledge and demonstrating skills to provide safe, effective resident/client care. (30/15 and 30 clinical hours) Prerequisite: Minimum Reading Accuplacer score of 70 or ACT score of 18

HSC:949 Selected Topics .5 - 2 Credits
A course designed to enable students to complete equivalent content related to health program curriculum. Students together with a faculty advisor choose a course of study and establish objectives, timelines, and an action plan. (0/16-64 lab hours or 0/24-96 clinical hours) Prerequisite: Consent of the department dean and faculty advisor

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HSV: HUMAN SERVICES

HSV:150 Human Services Technology I 3 Credits
Defines human services from several perspectives; traces the development of the profession; emphasizes the human service model of service delivery; offers insight into some of the most common dilemmas of helpers; promotes the human service worker as a professional. Course content and process encourages and challenges students to individual exploration and increased self-awareness. (48/0)

HSV:151 Human Services Technology II 3 Credits
Prepares students to assess, develop, write, and evaluate programming for clients with diverse problems in living, including mental retardation, mental illness, developmental disabilities, physical impairments, and other crisis-related situations. Topics include: multicultural competence, interview and assessment skills, collaboration with clients and other professionals, goal setting, service planning, intervention, treatment protocols, case management, and integrated practice. (48/0) Prerequisite: HSV:150

*HSV:160 Making a Difference 3 Credits
(Also listed as EDU:125.) Introduces careers related to working with people with disabilities; this includes a special emphasis on the need of paraeducators in the classroom learning environment. Introduces special education, residential services, vocational services, recreational services, and other services for children and adults with disabilities along with an introduction to specific disabilities and human development. Covers professionalism, teamwork, instructional strategies, interventions, communications skills, and behavior management. Requires completion of service learning projects. (48/0)

*HSV:161 Observation and Management of Behavior 3 Credits
(Also listed as EDU:126.) Designed for paraeducators, this course places emphasis on the management of behavior in a classroom environment. Skills necessary to monitor and modify both individual and group behavior are developed. Includes strategies for self-management of behavior. (48/0)

*HSV:162 Introduction to Human Disabilities and Services 3 Credits
(Also listed as EDU:175) A comprehensive introduction to the study of people with special needs. Covers causes of disabilities, characteristics of persons with disabilities, intervention strategies, services provided for these populations, trends, future perspectives, and issues affecting people with special needs. (48/0)

*HSV:225 Counseling Techniques 3 Credits
Explores the relationship between counselor and client(s); the communication process; the cognitive, affective, and behavioral nature of client problems; the counselor's influence in the helping process; the client's influence; and the models of counseling interventions from which the counselor selects. (48/0)

*HSV:250 Essentials of Behavioral Modifications 3 Credits
Provides skills necessary in dealing with problem behavior. The program's main thrust is in developing, maintaining, and strengthening positive behavior management techniques in general and special educational settings. (48/0)

*HSV:255 Addictive Disease Concepts 3 Credits
Explores addiction from its historical and theoretical background to current concepts. A variety of addictive behaviors are examined with special focus on psychoactive drug dependency. (48/0)

*HSV:260 Treatment of Alcohol and Drug Abuse 3 Credits
Emphasizes the concept that treatment of alcohol and drug abuse is a continuum of processes from intervention through rehabilitation. The integral parts of the continuum and ways in which it addresses the needs of people suffering from alcohol and drug abuse will be incorporated. (48/0)

*HSV:270 Crisis intervention 3 Credits
(Also listed as PSY:294) Provides theoretical and historical information regarding the development of crisis intervention. Offers opportunities to learn and practice specific skills and techniques for diverse crisis situations, especially those applicable to working with persons with psychological disorders, as well as exploring the behavioral, legal, ethical, and cultural implications for interventions. The most common types of crisis will be investigated as well as safety guidelines and stress management techniques for crisis intervention workers. (48/0) Pre-/corequisite: PSY:111 or SOC:110

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*HSV:280 Psychosocial Rehabilitation 3 Credits
Emphasizes the rehabilitation model, values, and techniques for direct service delivery to persons with severe mental disabilities. Develops knowledge and basic skills necessary for rehab goal planning, functional assessment, and direct skills teaching along with job development, analysis, matching, and retention. (48/0)

HSV:847 Human Services Field Experience I 2.5 Credits
Opportunity to apply theory and develop skills in helping clients meet their needs in essential areas of development. The supervised practicum provides exploration into areas of student interests. (8/0 and 128 co-op hours) Pre-/corequisite: HSV:150

HSV:848 Human Services Field Experience II 1.25 Credit
Opportunity to apply theory and develop skills in helping clients meet their needs in essential areas of development. This supervised practicum provides exploration into areas of student interests.
(4/0 and 64 co-op hours) Pre-/corequisite: HSV:847

HSV:849 Human Services Field Experience III 1.25 Credit
This third course (not necessarily consecutive) provides opportunity to apply theory and develop skills in helping clients meet their needs in essential areas of development. Field Experience III may be taken concurrently during a semester with Field Experience II or taken alone following Field Experience I. Student tasks should be progressive and more complex.
(4/0 and 64 co-op hours) Pre-/corequisite: HSV:848

HSV:850 Human Services Field Experience I 3 Credits
Opportunity to apply theory and develop skills in helping clients meet their needs in essential areas of development. The supervised practicum provides exploration into areas of student interests.
(16/0 and 128 co-op hours) Pre-/corequisite: HSV:150

HSV:851 Human Services Field Experience II 3 Credits
Opportunity to apply theory and develop skills in helping clients meet their needs in essential areas of development. This supervised practicum provides exploration into areas of student interests.
(192 co-op hours) Pre-/corequisite: HSV:850

HSV:852 Human Services Field Experience III 3 Credits
This third course (not necessarily consecutive) provides opportunity to apply theory and develop skills in helping clients meet their needs in essential areas of development. Field Experience III may be taken concurrently during a semester with either Field Experience II or IV, or taken alone following Field Experience I. Student tasks should be progressive and more complex. (16/0 and 128 co-op hours)
Pre-/corequisite: HSV:851

HUM: HUMANITIES

*HUM:108 Cultural Diversity and Identity 3 Credits
Provides a definition of self-identity and culture which will enable students to effectively communicate and interact transculturally. As future professionals in particular disciplines, students will gain knowledge to assist them in a variety of cultural settings. The course focuses on a variety of issues concerning the nature of personal and cultural identity within our pluralistic society. (48/0)

*HUM:116 Encounters in Humanities 3 Credits
A survey course of the human condition as seen through various arts such as literature, painting, sculpture, architecture, music, dance, film, theater, and others. (48/0)

*HUM:125 Broadway Musical History 3 Credits
Covers the history and development of the Broadway musical from approximately 1860 to the present. (48/0)

*HUM:130 Holocaust Perspectives: Confronting the Future 3 Credits
An interdisciplinary survey course examining the Holocaust as a 20th century incident of genocide, which was used as a technique of political control and racial persecution. Recent resurgence of similar events and philosophies based on race, religion, and other prejudices justifies special attention to the causes of the Holocaust. The meaning, impact, and aftermath of the Holocaust is explored through history, literature, arts, sociology, and science with emphasis on tolerance, diversity, and human understanding. (48/0)

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*HUM:140 Shakespeare: Dramatist, Psychologist, Historian 3 Credits
(Also listed as LIT:145) A team-taught, interdisciplinary (English, Psychology, History) introduction to Shakespeare's great plays. Includes the study of the plays from a dramatic analysis of recurrent themes, ideas, characterizations; an analysis of characters as to psychological classifications; and a study of historical periods which form the settings of the plays. (48/0) Prerequisite: ENG:105 with a minimum grade of C- or an equivalent composition course at another college or university with a minimum grade of C-

*HUM:170 Introduction to Women's Studies 3 Credits
Introduces major issues concerning women via an examination and analysis of images and roles of women in such areas as history, philosophy, psychology, sociology, literature and the arts. Includes a multidisciplinary approach to the study of feminism, evaluation and analysis of sex-role stereotyping, and the subsequent socialization of genders in institutions, programs, and curricula in attempts to create the "egalitarian" society. (48/0) Prerequisite: ENG:105 with a minimum grade of C- or an equivalent composition course at another college or university with a minimum grade of C-

IND: Industrial Technology

IND:118 Commercial Drivers License 1 Credit
Preparation to take the Commercial Drivers License knowledge inspection, skills, and driving tests. Covers driving safety, transporting cargo safely, and hazardous materials. (12/8)

LGL: Legal Assistant

*LGL:110 Introduction to Paralegal Studies 4 Credits
Introduces the layperson to the duties and responsibilities of a paralegal. Provides an overview of legal principles in a variety of areas of the law and a practical introduction to the duties and responsibilities of paralegals in the workplace. Teaches the terminology of various legal areas. (64/0)

*LGL:130 Legal Assistant - Probate/Real Estate 3 Credits
The skills and competencies to be a paralegal and assist an attorney in the area of wills, trusts, guardianships, conservatorships, probate administrations, real estate transactions, real estate closings, abstract examinations, title opinions, certificates of title, and other related documentation. Stresses familiarity with the computer document forms of the Iowa State Bar Association as well as preparation and preservation of computer files of frequently used documents. The real estate paralegal can relieve the supervising attorney or realtor of much detail in the preparation of necessary documents. (36/24) Prerequisites: LGL:110

*LGL:150 Legal Assistant - Legal Writing/Research 3 Credits
Preparation for the skills and competencies needed to be a paralegal and assist an attorney in the area of legal writing and legal research to relieve the attorney from the detail necessary in the preparation of trial briefs, legal memoranda, supreme court memoranda and briefs, correspondence, and other legal documents. Emphasizes the preparation needed to write in an analytical or informative style as well as a persuasive manner. (32/32) Prerequisites: LGL:110

*LGL:170 Legal Assistant - Litigation 3 Credits
Course prepares students for the skills and competencies to be a paralegal and assist an attorney in the area of litigation to relieve the attorney from the detail necessary for trial preparation from the instant the dispute attains the responsibilities of the attorney-client relationship. (48/0)

* LGL:190 Legal Assistant - Taxation 3 Credits
The skills and competencies needed by paralegals to assist attorneys in taxation and tax preparation. Extensive instruction in the areas of income, federal estate and fiduciary income taxation, skills and competencies needed to generate prepared tax returns including computer literacy with respect to a widely used computer tax preparation program. (32/32)

LGL:220 Mock Trials 1 Credit
Introduces the basic law concepts and persuasive and debate speaking as they apply to the legal system and the simulated trial format. (16/0)

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*LGL:230 Criminal Law and Procedure 3 Credits
(Listed also as CRJ:131) Prepares the student with the skills and competencies to understand criminal law and procedure and to assist a prosecuting attorney or a criminal defense attorney/public defender in the area of investigation and litigation. (48/0)

*LGL:250 Family Law 3 Credits
Analyzes the legal, ethical, and social aspects of family law issues. Introduces concepts concerning the legal relationships of marriage and analyzes premarital and post-marital issues as they relate to children, custody, support, and property rights. Presents the legal, ethical, and practical considerations involved in marital and non-marital relationships, and examines the institutions and programs affecting the marital partners, children, and other affected individuals. (48/0)

*LGL:270 Evidence 3 Credits
(Also listed as CRJ:230) Analyzes the area of evidence from the perspective of a participant in the criminal justice system. Introduces concepts concerning the criminal justice process, direct and circumstantial evidence, witness testimony, the hearsay rule and its exceptions, and obtaining evidence admissible in a court proceeding. Students learn about the legal, ethical and practical considerations involved in identifying and obtaining evidence and the rules concerning the use of evidence in a criminal justice context. (48/0)

LIT: LITERATURE

*LIT:101 Introduction to Literature 3 Credits
Focuses on the craft of narrative literature with an emphasis on analysis and response. Includes the study of established as well as recent literary texts. (48/0) Prerequisite: ENG:105 with a minimum grade of C- or an equivalent composition course at another college or university with a minimum grade of C-

*LIT:142 Major British Writers 3 Credits
Introduction to the study and appreciation of major British writers particularly from the post-Renaissance through the contemporary period. Basic critical approaches are emphasized. (48/0) Prerequisite: ENG:105 with a minimum grade of C- or an equivalent composition course at another college or university with a minimum grade of C-

*LIT:145 Shakespeare: Dramatist, Psychologist, Historian 3 Credits
(Also listed as HUM:140.) A team-taught, interdisciplinary (English, Psychology, History) introduction to Shakespeare's great plays. Includes the study of the plays from a dramatic analysis of recurrent themes, ideas, characterizations; an analysis of characters as to psychological classifications; and a study of historical periods which form the settings of the plays. (48/0) Prerequisite: ENG:105 with a minimum grade of C- or an equivalent composition course at another college or university with a minimum grade of C-

*LIT:186 Cultures Through Literature3 Credits
Focuses on the reflection of various world cultures in literature and its relation to enduring human issues. Includes discussion and writing of selected readings chosen from differing literacy forms. (48/0) Prerequisite: ENG:105 with a minimum grade of C- or an equivalent composition course at another college or university with a minimum grade of C-

MAT: MATHEMATICS

**MAT:041 Basic Math 3 Credits
Develops basic math proficiency in the units of whole numbers, fractions, decimals, ratios and proportions, percents, statistics, U.S. customary units of measurement, metric system, geometry, signed numbers, and algebra. (48/0) Prerequisite: Qualifying placement scores

**MAT:053 Prealgebra 4 Credits
Designed for students who have never had algebra or who have a weak background in pre-algebra skills. Reviews some basic arithmetic using an algebra emphasis and introduces basic algebra concepts. Topics include fractions, decimals, ratios and proportions, percents, geometry concepts of perimeter, area and volume, integers, exponents, algebraic expressions, simple equations, graphing of ordered pairs, linear equations. (64/0) Prerequisite: Qualifying placement scores

**MAT:063 Elementary Algebra 4 Credits
A course in basic algebra. Topics include real numbers, variable expressions solving equations, polynomials, factoring algebraic fractions, graphs and linear

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equations, systems of linear equations, inequalities, radical expressions, and quadratic equations. (64/0) Prerequisite: A minimum grade of C- in MAT:053 or qualifying placement scores

**MAT:102 Intermediate Algebra 4 Credits
Reviews real numbers and polynomials. Studies first-degree equations in two variables, rational expressions, exponents and radicals, quadratic equations, graphing functions and relations, conic sections, systems of equations, inequalities, exponential and logarithmic functions, and sequences and series. (64/0) Prerequisite: A minimum grade of C- in MAT:063 or qualifying placement scores

*MAT:110 Math for Liberal Arts 3 Credits
A survey of mathematical ideas emphasizing mathematical techniques for problem solving. Includes set theory, logic, algebra, graphs, counting techniques, probability, statistics, and consumer math. (48/0) Prerequisite: A minimum grade of C- in MAT:063 or qualifying placement scores

*MAT:120 College Algebra 3 Credits
Assists in formalizing previously developed algebraic concepts and demonstrates further concepts and techniques necessary for subsequent study in mathematics. Topics include algebraic operations, exponents, radicals, logarithms, solution of linear and quadratic equations, systems of equations, determinants, complex numbers, inverse functions, graphing, and other topics of advanced algebra. (48/0) Prerequisite: A minimum grade of C- in MAT:102 or qualifying placement scores

*MAT:128 Precalculus 4 Credits
Prepares students for calculus. Precalculus studies the nature of elementary functions and their role in mathematics by integrating a combination of algebra and trigonometry. Topics include the real number system, functions, polynomials and rational functions, exponential and logarithmic functions, trigonometric functions, trigonometric identities, analytic trigonometry, systems of equations, and matrices. (64/0) Prerequisite: A minimum grade of C- in MAT:102 or qualifying placement scores

*MAT:130 Trigonometry 3 Credits
Acquaints students with the branch of mathematics which deals primarily with six ratios: the six trigonometric functions. Also introduces logarithms and complex numbers. (48/0) Prerequisite: A minimum grade of C- in MAT:120 or qualifying placement scores

*MAT:140 Finite Math 3 Credits
Finite Math is a transfer-level college math class which acquaints students with a variety of non-calculus math topics. Some topics include: methods for obtaining solutions of linear and quadratic equations and inequalities, methods for obtaining solutions to systems of linear equations and inequalities, set theory, counting techniques, basic probability rules, and basic concepts of statistics. (48/0) Prerequisite: A minimum grade of C- in MAT:102 or qualifying placement score

*MAT:156 Statistics 3 Credits
Introduces the basic methods of statistical reasoning to help develop the ability to summarize data, interpret data, and draw conclusions based on the data. (48/0) Prerequisite: A minimum grade of C- in MAT:102 or qualifying placement scores

*MAT:210 Calculus I 4 Credits
Help in gaining an understanding of calculus and analytical geometry, differentiation, and applications. (64/0) Prerequisites: A minimum grade of C- in MAT:120 and MAT:130, or a minimum grade of C- in MAT:128, or qualifying placement scores

*MAT:216 Calculus II 4 Credits
The second in the calculus sequence. Students gain an understanding of integral calculus and further their knowledge of analytical geometry. Emphasizes integration, inverse functions, and applications of the integral. (64/0) Prerequisite: A minimum grade of C- in MAT:210

*MAT:219 Calculus III 4 Credits
The third course in the calculus sequence. Students gain understanding of analytical geometry and further their knowledge of derivatives. Emphasizes plane curves and polar coordinates, vectors in space, partial derivatives, multiple integrals, and complex numbers. (64/0) Prerequisite: A minimum grade of C- in MAT:216

MAT:744 Technical Math 4 Credits
Introduces selected topics from algebra and trigonometry with everyday applications to the technical areas. Some topics presented include the solution of linear and quadratic equations, trigonometric functions, vectors, graphing, and equations. (64/0) Prerequisite: A minimum grade of C- in MAT:063 or qualifying placement scores

MAT:779 Applied Trigonometry 3 Credits
Teaches the trigonometric concepts and skills needed in basic science, technology, and mathematics itself.

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A scientific calculator is used in place of trigonometric tables in all computations. (48/0) Prerequisite: A minimum grade of C- in MAT:041 or MAT:053 or qualifying placement scores

MFG: MANUFACTURING

MFG:121 Machine Trade Print Reading 2 Credits
Deals with types of lines, development and arrangement of views, dimensioning practices, and invisible edges. Incorporates practical problems from prints suited to the particular trade. (16/32)

MFG:160 Materials Science 3 Credits
Studies the physical and mechanical properties of engineering materials and their use in mechanical application. Metallurgical laboratory work is performed to acquaint students with stress, strain, hardness, shear, compression, and microstructure. (32/32)

MFG:206 Manufacturing Processes I 3 Credits
Information relative to the various casting and forming processes associated with the manufacturing industry. Through lecture, demonstration, and field trips, opportunity is given to become familiar with the fundamentals of metal forming, casting, powder metallurgy, hot and cold working, and also the measurement and inspection associated with the products of these processes. (32/32) Prerequisite: MFG:160 or instructor approval

MFG:212 Basic Machine Theory 3 Credits
Classroom and shop instruction on how to set up, operate, and maintain typical machine shop equipment. Various practical shop project setups are used to reinforce principles studied. (48/0) Corequisite: MFG:225

MFG:215 Advanced Machine Theory 3 Credits
Classroom theory in drilling, turning, vertical milling, horizontal milling, material selection and metallurgy, rotary table and index devices milling, gears and gear cutting and grinding, and abrasive machining. (48/0) Prerequisite: MFG:212

MFG:220 Machine Operations I 2 Credits
Provides an understanding of turning, knurling, and threading on the engine lathe. (0/80) Prerequisite: MFG:225. Corequisite: MFG:212

MFG:225 Machine Operations I 8 Credits
Practice and development of skill in various aspects of a machine shop. Practical projects are used for skill development to add realism to shop work. (0/256) Corequisite: MFG:212

MFG:226 Machine Operations II 2 Credits
Provides an understanding of heat treating as well as surface and angular grinding on the surface grinder. (0/80) Prerequisite: MFG:231

MFG:231 Machine Operations II 8 Credits
Provides an understanding of turning, boring, and specialty threading on the engine lathe, angular milling, boring and indexing on the milling machine. (0/256) Prerequisite: MFG:220

MFG:300 Introduction to Computerized Numerical Control (CNC) 3 Credits
The fundamentals of computerized numerical control. Point-to-point continuous programming with "M" and "G" code language is utilized. Includes familiarization with robotics and automation while utilizing the robotic trainer and work cell mark up. (16/64)

MFG:303 Computerized Numerical Control (CNC) Fundamentals 10 Credits
Introduces programming for computer numerical control with an emphasis on learning CNC language. Students slowly move from simple parts to more complex parts on lathes and mills. The course continues into canned cycles, looping, some subcontinis, and more advanced students may get into internal machining with the lathes. (48/220) Prerequisites: MFG:226

MGT: MANAGEMENT

*MGT:102 Principles of Management 4 Credits
A study of basic factors in the business environment that affect managerial decision making. Emphasis is placed on the four functions of management as well as a discussion of managerial ethics and social responsibility. (64/0)

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MGT:105 Farm and Financial Management 2 Credits
Provides basic farm and home management information to farm families. Management is a key component of survival for today's farmers. The class is an organized yet flexible educational program through which farm families can participate over a three-year period. Emphasis is placed on family members jointly working through farm and family decisions. (33/0)

*MGT:110 Small Business Management 3 Credits
A thoroughly contemporary treatment of the startup and management of small firms. Includes a strong emphasis on entrepreneurial opportunities and new venture activities needed for the successful operation of small firms. (48/0)

*MGT:170 Human Resource Management 3 Credits
Introduces material essential to an understanding of job analysis, supervision, personnel selection, testing, appraisal, compensation, and maintaining performance. Development of a human resources philosophy is used as an integrating theme. (48/0) Prerequisite: MGT:102

*MGT:180 Management and Labor Relations 3 Credits
An overview of labor law as well as a historical view of labor/management relations. Investigates the role that unions play in shaping our society. Students will examine some of the current concerns and problems facing both labor and management. (48/0)

*MGT:186 Negotiation and Conflict Management 3 Credits
A study of the interpersonal processes that function in the areas of social and business negotiation, communication, dispute resolution, and conflict management. (48/0)

*MGT:215 Principles of Financial Management 3 Credits
A study of money supply and demand in the capital market and credit policies as they affect the business enterprise. Covers the principles for determining the best relationship between short-term and long-term debt and owner's equity. (40/16) Prerequisites: ACC:152; and ECN:120 or ECN:130

MKT: MARKETING

*MKT:110 Principles of Marketing 3 Credits
Covers the broad concept of marketing including product, distribution, promotion, and price decisions. Involves discussion of the role of buyers, social issues involved in the marketing process, environmental problems, and the philosophy of marketing management. (48/0)

MKT:120 Electronic Marketing 3 Credits
Targets those who will undertake entrepreneurship or e-business development. E-business practices are being used by new venture startups, "dot.com" companies, and established businesses, and is about transforming business to gain efficiencies. Marketing and business professionals must be trained to devise strategies and enhance customer relationships by working with technology specialists to apply marketing strategies to a new business model. (48/0)

*MKT:140 Principles of Selling 3 Credits
The fundamentals of selling. Stresses techniques used for different sales situations. Emphasizes industrial and wholesale selling and retail selling. (40/16)

MKT:142 Consumer Behavior 3 Credits
Exposure to business transactions from three viewpoints—business, government, and consumer. Addresses the need to insure mutually satisfying exchanges in the market place via a major emphasis on consumer rights. (48/0)

*MKT:150 Principles of Advertising 3 Credits
The history of advertising and the planning and research functions of successful advertising. Studies the technique and execution of advertising in business and in our fast-paced changing society. (32/32)

MKT:162 Retail Merchandising 3 Credits
Background knowledge and skills necessary in the operation of a successful retail store, as well as the opportunity to learn how to use merchandising information and concepts involved in planning the retail functions of buying, selling, promotion, and store operation. (48/0)

*MKT:190 International Marketing 3 Credits
An overview of the international marketing environment and the special issues confronting the international marketer such as cultural influences, trade barriers,

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promotion and marketing of services; pricing strategies; sources of financing; and currencies and foreign exchange. (48/0)

MKT:275 Marketing Occupational Experiences I 2 Credits
On-the-job training in a cooperating business correlated with each student's career objective. This training period provides practical experience that enables students to find successful employment. (128 co-op hours)

MKT:276 Marketing Occupational Experiences II 6 Credits
On-the-job training in a cooperating business correlated with each student's career objective. In addition, students will be required to fill out program forms, complete case studies in a related case packet, and evaluate themselves once during the semester. This training period will provide practical experience to enable students to find successful employment. (384 co-op hours)

MKT:277 Marketing Occupational Experiences III 2 Credits
On-the-job training in a cooperating business correlated with each student's career objective. The training period provides practical experience to enable students to find successful employment. (128 co-op hours)

MKT:278 Marketing Occupational Experiences IV 2 Credits
On-the-job training in a cooperating business correlated with each student's career objective. The training period provides practical experience to enable students to find successful employment. (128 co-op hours)

MKT:298 Seminar in Entrepreneurship 3 Credits
Application of entrepreneurship concepts in a seminar setting. Presentation of actual business issues and problems. Work in teams to address and present assistance and solutions to participating business partners. Presentations to participating business partners will be required. (16/64)

MKT:943 Readings 3 Credits
Enables students to pursue research related to marketing and to their individual career interest(s). Together with a faculty advisor, students choose a course of study and establish objectives, timelines, and an action plan. (0/96)

MLT: Medical Lab Tech

MLT:101 Introduction to Lab Science 2 Credits
Familiarization with the Medical Lab Tech program and the field of laboratory medicine. Explores the organization and role of the clinical laboratory as well as medical ethics and conduct, employment opportunities, and professional organizations. (32/0) Prerequisites: BIO:165, CHM:110, COM:020; and PSY:111 or SOC:110

MLT:120 Urinalysis 3 Credits
The study of urine formation and methodology of determining the physical, chemical, and microscopic properties of urine in normal and abnormal states. (32/32)

MST: Massage Therapy

MST:114 Pathology for Massage Therapy I 1.25 Credit
Basic study of pathology and its applications to human diseases. Emphasizes conditions and disorders that include indications and contraindications to massage and movement. (20/0)

MST:115 Pathology for Massage Therapy II 1.25 Credit
A continuation of the basic study of pathology and its applications to human diseases. Emphasis on conditions and disorders that include indications and contraindications to massage and movement. (20/0) Prerequisite: MST:114

MST:116 Kinesiology I 2 Credits
Covers the individual muscles and primary muscle functions important to massage therapy. Identifies muscle attachment (origin and insertion) and muscle movement. Discusses nerve innervation and trigger point areas/referred pain patterns. (20/24)

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MST:117 Kinesiology II 2.5 Credits
Continues to cover the individual muscles and primary muscle functions important to massage therapy. Identifies muscle attachment (origin and insertion) and muscle movement. Discusses nerve innervation and trigger point areas/referred pain patterns. (24/32) Prerequisite: MST:116

MST:125 Reflexology 1.5 Credits
The fundamentals of reflexology. Students learn how reflex points in the foot and hand relate to other areas of the body. (16/16) Prerequisites: MST:128, MST:130, MST:250

MST:128 Massage I 4 Credits
A historical overview of the massage therapy profession. Emphasizes understanding and knowledge of Swedish massage techniques and instruction on applications of the basic Swedish massage strokes and variations. Hygiene, sanitation, draping, positioning, and client feedback techniques are taught. Introduces therapeutic relationship between client and practitioner. (32/64)

MST:130 Massage II 4 Credits
Expands Massage skills. Consists of hands-on application of body massage techniques. Introduces professional massage technique of chair massage for the head, neck, shoulders, arms, back, and hips of the seated client. Introduces alternative massage therapies. (32/64) Prerequisite: MST:128

MST:136 Massage in Special Populations 2.5 Credits
Explores massage needs for clients with diverse needs. Includes massage guidelines in special populations such as infants, children, and older adults. Explores guidelines for special needs related to athletes, physical limitations, psychological limitations, and pregnancy. (32/16) Prerequisite: MST:130

MST:145 Massage Business Management 2 Credits
Provides a strong foundation on the business aspect of operating a massage practice. A knowledge of business principles, bookkeeping, scheduling, budgets, advertising, marketing, and salon issues are crucial to the massage therapist. Teaches how to write and implement a massage business plan and record keeping system. (32/0) Prerequisites: MST:128, MST:130

MST:153 Deep Tissue Massage 3 Credits
Massage skills related to mechanical and reflexive connective tissue functions using light and deep touch and cross-fiber friction methods. (32/32) Prerequisites: MST:116, MST:117, MST:125, MST:128, MST:130, MST:250

MST:160 Legal and Ethical Issues in Massage Practice 1.5 Credits
The legal issues involved in massage practice related to stands of practice, consent, and patient confidentiality. Introduces business considerations in practice establishment. (24/0)

MST:161 Professional Boundaries in Massage Practice 1.5 Credits
Focuses on client-practitioner dynamics in recognizing the vulnerability of clients and the need to create a safe and respectful relationship. (24/0) Prerequisite: MST:160

MST:166 Modalities in Massage Therapy 2.5 Credits
Addresses origins and theoretical framework of contemporary western bodywork, Asian, and energetic bodywork. Presentation of alternate modalities prepare students to explore areas of professional specialization. (32/16) Prerequisites: MST:125, MST:153, MST:253

MST:250 Massage Therapy Practical Skills I .5 Credit
The first in a series of massage therapy practicums required before advancement into the other practicums. In the clinic, students will demonstrate professional and ethical principles and communication skills, proper body mechanics, correct hygiene, sanitation, and safety techniques as well as the basic preparation, assessment and techniques used for Swedish massage. (0/16) Prerequisites: MST:128; and BIO:157 or BIO:165. Corequisites: MST:130; and BIO:165 or BIO:170

MST:252 Massage Therapy Practical Skills II 1 Credit
Opportunity for further development of practical skills necessary to administer a one-hour professional full-body massage. (0/32) Prerequisite: MST:250

MST:253 Massage Therapy Practical Skills III 1.5 Credits
Opportunity to expand on their Swedish massage techniques, including reflexology methods and the opportunity to practice chair massage therapy. (0/48) Prerequisite: MST:252

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MST:255 Massage Therapy Practical Skills IV 1.5 Credits
Continued opportunity to perform a variety of massage techniques in the clinical setting. (0/48) Prerequisite: MST:253

MST:260 Massage Therapy Comprehensive Review 2 Credits
An overview of previous classes required and successfully completed. Students will be prepared for their National Certification Examination for Therapeutic Massage and Bodywork as well as becoming successful massage therapists. (32/0) Prerequisites: MST:130, MST:250. Corequisites: MST:125, MST:153

MTR: Medical Transcription

MTR:145 Advanced Medical Transcription 4 Credits
Advances the students' medical transcription skills in the areas of cardiology, gastrointestinal, radiology, pathology, and orthopedics. (32/64) Prerequisite: A minimum grade of C- in IT:603

MUA: Music – Applied

MUA:101 Applied Voice 1 Credit
Basic study in the development of vocal technique. Through the study of vocalises and song literature, students will have the opportunity to develop skills such as correct posture, breathing, tone quality, enunciation, and diction. Students may earn a maximum of four credits over the course of four semesters (8/16)

MUA:120 Applied Piano 1 Credit
A class for non-music major or the music major with no previous piano experience. Teaches basic musicianship of note-reading and proper technique on the piano through exercises and solo literature in a group setting. Students will be required to practice on their own outside of class (16/0)

MUA:147 Applied Instrumental 1 Credit
Private instruction on the instrument of the student's choice through the study of scales and arpeggios, technical etudes, and solo literature. Students will have the option of the following instruments: violin, viola, cello, bass, guitar, flute, oboe, clarinet, bassoon, saxophone, horn, trumpet, trombone, tuba, baritone, euphonium, percussions, or piano. Students may earn a maximum of four semester hours over the course of four semesters. (8/16)

MUA:220 Applied Piano II 1 Credit
A continuation of Applied Piano for students who have successfully completed that course or those with some piano experience who have been placed in this course with teacher approval. Course continues to introduce basic theory and playing techniques through lesson and theory pages and solo literature in a group setting. Students will be required to practice on their own outside of class. (0/16) Prerequisite: MUA:120 or testing into this level

MUS: General Music

*MUS:100 Music Appreciation 3 Credits
A survey of the development of music through study of representative compositions of many periods and styles. Vocabulary presented to discuss the musical works. (48/0)

*MUS:102 Music Fundamentals 3 Credits
Discusses basic music elements for those with little or no previous music theory. (48/0)

*MUS:120 Music Theory I 3 Credits
Studies the fundamentals of music theory, including voice leading and harmonization. Includes study of melody, rhythm, and texture in a historical context. (48/0) Prerequisite: MUS:102 or passing a theory placement test

*MUS:140 Concert Choir 1 Credit
Opportunity to experience choral singing. The performing group meets regularly and presents a wide variety of choral literature. The choir provides programs for college activities. A maximum of four semester hours may be earned. (0/48)

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MUS:162 Instrumental Ensembles 1 Credit
Opportunity to experience instrumental music in an ensemble setting. Students will attend regular rehearsals, perform in concerts, and prepare and present a wide variety of instrumental literature. Students may choose from several local ensembles (Dubuque Community String Orchestra, University of Dubuque Jazz Band, Loras College Wind Band, etc.) A maximum of four semester hours may be earned. (0/32) Prerequisite: Approval of ensemble director

NET: COMPUTER NETWORKING

NET:115 Troubleshooting 2 Credits
Provides knowledge of basic troubleshooting skills applicable to microcomputer hardware and software. (20/24) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: BCA:112

NET:116 Computer Systems and Troubleshooting 5 Credits
Designed to teach and improve personal computer configuration and troubleshooting skills necessary to function as a PC support or help desk technician. Topics include PC system's overview, CPU's, primary and secondary storage, video monitors, printers, and troubleshooting techniques. (48/64) Prerequisite: A minimum grade of C- in ELT:613 or ELT:630

NET:134 Operating Systems 4 Credits
Provides experiences needed to effectively control the operation and resource allocation of a computer system. Emphasizes effective internal resource management in general and how these principles apply to the mainframe, mid-range (AS/400), and micro computing environments. (40/48) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: BCA:112, CIS:120

NET:146 Introduction to Local Area Networking 3 Credits
Explains how Local Area Networks (LANs) and their various hardware and software components work. Provides understanding of the theory behind the various kinds of network architecture, data transmission methods (how information is sent through a network), the major LANs currently on the market, and the degree of compatibility between different LANs. (48/0) Prerequisites: CIS:125, ELE:113 or equivalent

NET:150 Introduction to Computer Networking 5 Credits
The fundamentals of network administration based upon the latest Novell Network software. Topics include: Novell Directory Services, network file system, NDS and file security, printing, log-in scripts, and NetWare installation. Upon course completion, students will be eligible to take the Certified NetWare Administrator exam. (48/64) Prerequisite: A minimum grade of C- in ELT:328

NET:248 Cisco Discovery: Networking for Home and Small Business 3 Credits
The first of two courses leading to the Cisco Certified Entry Network Technician (CCENT) certification exam and the first of the four courses leading to the Cisco Certified Network Associate (CCNA). Teaches skills needed for entry-level home network installer jobs and some of the skills needed to become network technicians, computer technicians, cable installers, and help desk technicians. Hands-on introduction to networking and the Internet using tools and hardware found in home and small businesses environments. (32/32)

NET:249 Cisco Discovery: Working at a Small-to-Medium Business or ISP 3 Credits
The second of two courses leading to the Cisco Certified Entry Network Technician (CCENT) certification exam and the second of the four courses leading to the Cisco Certified Network Associate (CCNA). Teaches skills required for computer technicians and help desk technicians. Covers servers providing email services, Web space, and authenticated access as well as soft skills required for help desk and customer service positions. Teaches network monitoring and basic troubleshooting skills in context. (32/32) Prerequisites must be passed with a minimum grade of C- to progress in the Computer Analyst major, and all Cisco class requirements must be met to progress through the Cisco class sequence. Prerequisite: NET:248

NET:250 Cisco Discovery: Introducing Routing and Switching in the Enterprise 3 Credits
The third of four courses leading to the Cisco Certified Network Associate (CCNA) designation. Teaches the

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skills needed for entry-level home network installer jobs. Covers equipment, applications, and protocols installed in enterprise networks, with focus on switched networks, Internet Protocol (IP) telephony requirements, and security. Introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises, including configuration, installation, and troubleshooting, reinforce learning. (32/32) Prerequisites must be passed with a minimum grade of C- to progress in the Computer Analyst major, and all Cisco class requirements must be met to progress through the Cisco class sequence. Prerequisite: NET:249

NET:251 Cisco Discovery: Designing and Supporting Computer Networks 3 Credits
The fourth of four courses leading to the Cisco Certified Network Associate (CCNA) designation. Teaches skills needed for entry-level home network installer jobs. Introduces network design processes using examples of a large stadium enterprise network and a medium-sized film company network. Covers standard design process to expand and upgrade each network, including gathering, proof-of-concept, and project management. Lifecycle services including upgrades, competitive analyses, and system integration are presented in the pre-sale support context. (32/32) Prerequisites must be passed with a minimum grade of C- to progress in the Computer Analyst major, and all Cisco class requirements must be met to progress through the Cisco class sequence. Prerequisite: NET:250

NET:318 Windows Server and Workstation 3 Credits
Introduces fundamental concepts and features of Windows client/server networking. Covers the basics of Windows Server and Workstation from the planning of the network to installing both client and server, managing the network using the administration tools, setting system security, installing applications, and configuring network printers. (32/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: NET:248

NET:320 Microsoft Server 4 Credits
Windows NT and LAN are used to explore different network configurations. Students set up Windows NT servers in a single- and multiple-domain network. Other server roles are implemented on a network. Students install a variety of Microsoft clients for the servers, as well as the Windows NT Internet Information Server, and will host a Web page on the LAN. Also covers network protocols, remote access, security, printing, and troubleshooting. (48/32) Prerequisites: A minimum grade of C- in: CIS:125; and CIS:205 or CIS:207

*NET:453 UNIX 3 Credits
Instruction in UNIX, a computer system used throughout the world that runs on virtually all types of computers. Teaches the basic skills required to get started in UNIX: starting and stopping a work session, entering commands, and using the keyboard. Covers the use of the vi editor, sending and receiving messages, and creating, displaying, and manipulating directories and files. (32/32) Prerequisite: A minimum grade of C- in CIS:142 or instructor approval

NET:481 Network Administration and Management 3 Credits
Introduces the fundamental concepts and features of network management and administrative duties performed by a network administrator. Focuses on the managerial aspects of network administration including discussions of total quality management as it applies to information systems. (32/32) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:731, NET:248; and NET:318 or NET:505

NET:505 Novell 3 Credits
Introduces fundamental concepts and features of Novell NetWare and covers the basics of Novell NetWare including the planning of the network, installing both server and client, managing the network using the administration tools, setting system security, installing applications, and configuring network printers. (32/32) Prerequisite must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisite: NET:248

NET:946 Seminar 3 Credits
Networking and training and technical support solutions are designed for a simulated business. Development of this solution synthesizes knowledge learned and skills developed in previous courses. Explores emerging trends and new topics in networking technology and training and technical support. (16/64) Prerequisites must be passed with a minimum of a C- to progress in the Computer Analyst major. Prerequisites: CIS:505, CIS:724, CIS:731; and NET:318 or NET:505

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PEC: Coaching Officiating

*PEC:110 Coaching Ethics, Techniques, and Theory 1 Credit
Theories and techniques used in coaching as well as sport psychology, pedagogy, sport physiology, and ethics related to Standards for Professional Practice and Completed Performance. (17/0)

*PEC:115 Athletic Development and Human Growth 1 Credit
Exposes those interested in coaching authorization to an overview of the principles and concepts of human development across the life span with particular emphasis on childhood and adolescence. (12/8)

*PEC:120 Body Structure and Function 1 Credit
Familiarization with the anatomy of body parts and physiology as they pertain to athletics. Introduces nutrition and proper conditioning principles. (12/8)

*PEC:127 Care and Prevention of Athletic Injuries 2 Credits
Develops knowledge, skill, and personal judgment in the prevention, care, and treatment of athletic injuries. For those interested in obtaining the coaching endorsement. (24/16)

PHI: Philosophy

*PHI:101 Introduction to Philosophy 3 Credits
Instruction in and discussion of classic philosophical theories and systems with particular emphasis on the practical applications of philosophic thought. (48/0)

*PHI:105 Introduction to Ethics 3 Credits
A systematic study of theories of moral judgment and decision, conduct, values, and responsibility. Application of ethical concepts and principles are provided through a critical examination of contemporary issues such as bioethics, professional ethics, and the environment. No prerequisites, but PHI:101 is recommended. (48/0)

PHS: Physical Science

*PHS:142 Principles of Astronomy 3 Credits
Studies the elements of the solar system: planets, their moons, comets, asteroids, the sun as well as stars, galaxies, history of the universe, astronomical equipment, spectroscopy, and others. Presents astronomical principles in lecture at a low level of mathematical difficulty. Laboratory demonstrations will be used to enhance lecture material. (48/0)

*PHS:143 Principles of Astronomy Lab 1 Credit
An optional laboratory addition to the Intro. to Astronomy course. Students learn techniques used by astronomers in celestial surveying and use equipment in a lab setting to enhance lecture material. Lab assignments are done in individual and groups settings. (32/0) Prerequisite: PHS:142

*PHS:166 Meteorology, Weather, and Climate 4 Credits
Introduces meteorological concepts with the emphasis on the characteristics and composition of the atmosphere, weather observations, atmospheric stability and circulation, atmospheric storms, climatology, and meteorological applications. (48/32)

*PHS:170 Physical Geology 3 Credits
A comprehensive study of the Earth's physical processes and properties and how geologic features change with time. (48/0)

*PHS:171 Physical Geology Lab 1 Credit
A study of the Earth's physical processes and properties through laboratory exercises and field trips. (0/32) Pre-/corequisite: PHS:170

PHS:191 Introduction to Global Positioning Systems 1 Credit
Introduces Global Positioning Systems concepts. Includes: history and mechanics of GPS, applications, using a receiver, and post-processing of data. (12/8)

PHS:193 Introduction to GIS 3 Credits
Introduces desktop Geographical Information Systems (GIS) and their applications. Topics include getting data into a GIS, displaying data on maps, editing data, querying the data set, and displaying/printing/plotting the results of the queries. Gives hands-on experiences in practical applications of a geographical information

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system. Students design a GIS project from scratch, set the project parameters, collect data, and format the final project relating to their career fields. Computer proficiency strongly recommended. (20/56)

PHS:194 Spatial Analysis 1 Credit
Students learn to map the distribution of data such as population density, elevation, and distance. Spatial Analysis allows solutions to problems such as: What is the best location for a new retail outlet? How did we minimize environmental impact and hydrological changes due to development? Covers maximizing agricultural profit by knowing the relationship between soils and yield. Uses the Spatial Analysis Module with ArcView software. (8/16) Prerequisite: PHS:193

PHS:195 GIS 3D Analysis 1 Credit
Explores GIS maps in three dimensions. Students create surfaces from existing data sources and then explore the display capabilities of 3D GIS to visualize surface data. Students also create 3D GIS maps and analyze spatial relationships. Uses the ArcView software with the 3D Analyst extension. (8/16) Prerequisites: CAD:175, PHS:193

PHS:196 Introduction to Avenue Programming 1 Credit
Customizing ArcView projects through the Arc View native scripting language. Programming in Avenue gives GIS users the power to create specialized GIS tools for applications in their field. Students alter the Graphical User Interface (GUI) and script new controls for ArcView projects. Uses ArcView software. (8/16) Prerequisites: CIS:125, PHS:193

PHS:198 GIS Map Creation 3 Credits
Explores different processes to building a GIS map. Students create GIS maps manually by entering spatial data and automatically by importing spatial data. Students link their spatial data to existing data tables and explore the display capabilities of GIS using their maps. Uses AutoCAD map software. (32/32) Prerequisites: CAD:175, PHS:193

PHS:199 Map Interpretation and Remote Sensing 3 Credits
Demonstrates the use of raster imagery for Geographical Information Systems (GIS). Vector-based GIS is enhanced by raster imagery created by satellite or airborne systems. Spectral attributes are used to classify raster imagery into GIS themes. Uses common data formats and products to model a variety of applications. Uses ArcView software with the Image Analysis Extension and Auto CAD Map. (32/32) Prerequisites: MAT:156, PHS:198

PHY: PHYSICS

*PHY:106 Survey of Physics 4 Credits
Studies basic physical science principles of mechanics, thermodynamics, waves, electricity and magnetism, atomic and nuclear physics, and meteorology. (48/32) Prerequisite: MAT:063

*PHY:162 College Physics I 4 Credits
Basic physics principles in mechanics, work and energy, momentum, conservation laws, rotational motion, oscillations, waves, and thermodynamics. (48/32) Prerequisites: MAT:120 and MAT:130; or MAT:128; or instructor approval

*PHY:172 College Physics II 4 Credits
Basic physics principles concerned with electricity and magnetism, light and optics, and modern physics. (48/32) Prerequisite: PHY:162

PHY:710 Technical Physics 3 Credits
A study of basic physics principles. Covers measurement techniques, motion, forces, simple machines, work and energy, thermodynamics, and principles of solids, liquids, and gases. Emphasizes basic mathematical relationships within the various subject areas. Techniques developed should aid the student in any technical field. (32/32) Prerequisite: MAT:041

PNN: PRACTICAL NURSING

PNN:174 Nursing Concepts 7 Credits
Classroom, lab, and clinical experiences to build knowledge and application of the nursing profession, the nursing process, and technical skills required for client care. Students master skills of increasing complexity and use critical thinking skills.(72/40 and 60 clinical hours) Prerequisites: A minimum grade of C- in BIO:170, BIO:172, PNN:200, and successful completion of a

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75-hour state-approved nurse aid course.
Pre-/corequisites: ENG:105, PNN:204, PNN:270

PNN:200 Dosage Calculations 1 Credit
A review of fractions and decimals, conversions of metric, apothecary, and household units, and computations of drug dosages. (16/0) Prerequisite: Qualifying placement scores

PNN:204 Pharmacology Medications 1 Credit
Integral to this course is the classification of drugs affecting each body system. (16/0) Prerequisite:
A minimum grade of C- in BIO:170 and BIO:172

PNN:270 Introduction to Nutrition 2 Credits
Emphasizes a practical knowledge of good nutrition and some knowledge of diet therapy. Includes a background of adequate and accurate information on basic nutritional needs of the body. (32/0)

PNN:410 Nursing Care of Children 2 Credits
An introduction to the nursing care of children. Includes a beginning experience in the care of well and sick children with emphasis on health needs of the child and family at different stages of their life span. (20/12 and 18 clinical hours) Prerequisites: A minimum grade of C- in PNN:528, PSY:121

PNN:432 Nursing Care of the Childbearing Family 2.25 Credits
Introductory study of the reproductive aspects of life affecting the whole family. Basic principles underlying nursing skills necessary to promote optimum health and safety for mother and family during maternity cycle.(20/16 and 24 clinical hours) Prerequisites: A minimum grade of C- in PNN:528, PSY:121

PNN:527 Nursing Care of Adults I 3.5 Credits
A systematic approach for comprehensive care of adults. Each course unit covers a particular body system. Utilizes critical thinking approach as the student investigates adult disorders. (32/16 and 48 clinical hours) Prerequisite: A minimum grade of C- in PNN:174

PNN:528 Nursing Care of Adults II 6 Credits
Continuation of applying a systematic approach for comprehensive adult care. Each course unit covers a particular body system. Utilizes critical thinking as the student investigates adult disorders. (65/30 and 48 clinical hours) Prerequisites: A minimum grade of C- in PNN:204, PNN:270, PNN:527

PNN:529 Dimensions of Practical Nursing 4.25 Credits
Knowledge, skill, and understanding needed by the Practical Nurse in meeting emotional and physical needs of aging clients and patients with long-term illnesses. Includes practice in the role as a team member of the nursing profession for the care of older patients in normal and complex nursing situations. (44/16 and 48 clinical hours) Prerequisites:
A minimum grade of C- in PNN:410, PNN:432

POL: Political Science

*POL:111 American National Government 3 Credits
An introductory course covering the fundamental institutions and practices of American government and politics, including the structures and traditions of the Constitution, the presidency, the Congress, the judiciary, the bureaucracy, political parties, and interest groups. (48/0)

PSY: Psychology

*PSY:111 Introduction to Psychology 3 Credits
A survey of psychology including theoretical and experimental findings and applications from areas such as physiological learning, memory, personality, social, abnormal, and therapy. (48/0)

*PSY:112 Psychology of Human Relations 3 Credits
Covers all types of interactions among people—their conflicts, cooperative efforts, and group relationships. It is the study of those beliefs, attitudes, and behaviors that cause interpersonal conflict in our personal lives and in work-related situations. (48/0)

**PSY:114 Motivation and Attitudes I 4 Credits
Instruction to enable students to better understand themselves as individuals, parents, spouses, workers, as well as other roles they portray. Topics dealing with values, beliefs, fears, motivation, leadership, and others are discussed and shared. (64/0)

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*PSY:121 Developmental Psychology 3 Credits
An introductory course in human growth and development throughout the life span, including genetic, health, family, social networks, and other determinants of development. Includes related theories and theorists. (48/0)

**PSY:214 Motivation and Attitudes II 4 Credits
Studies what is involved in human motivation and attitudes, and allows students to access their own attitudes and how they can improve on them. Stresses the importance of self and employee motivation as well as having a positive attitude in work and life. (64/0)

*PSY:221 Early Child Psychology 3 Credits
A comprehensive early childhood education course designed to broaden the understanding and improve the skills of those dealing with young children from infancy through age five. Covers physical well being, care of infants in group settings, emotional health issues, children with special needs, social development, and fostering emergent curriculum. (48/0)

*PSY:222 Child Psychology 3 Credits
A study of growth and development from conception through late childhood. Emphasizes the physical, cognitive, emotional, and social development and influences of the environment, individual differences, and society. Includes theoretical perspectives, historical influences, and research implications. (48/0)

*PSY:226 Psychology of Aging 3 Credits
Studies the problems and issues of having a major portion of the population over age 65 and the prospect of continued growth in numbers. Social planners are directing resources into the study and care of an elderly population with particular emphasis on the scientific, personal, and social categories. (48/0) Prerequisite: PSY:121

*PSY:241 Abnormal Psychology 3 Credits
Understanding of the origin, symptoms, and treatment of the full range of mental disorders. Explores identification and classifications of mental disorders. Topics include maladaptive behavior, assessment, coping behaviors, personality disorders, and substance abuse. (48/0) Prerequisite: PSY:111

*PSY:251 Social Psychology 3 Credits
Explores the scientific knowledge of the way individuals think, feel, and behave in social situations. Reviews the classical and contemporary research findings in the areas of social thinking, social influence, and social relations. Explores applications of research findings to a variety of work and life situations. (48/0)

*PSY:261 Human Sexuality 3 Credits
(Also listed as SOC:261.) Traditional sexual values and attitudes are being challenged by several factors including advances in medical science, greater amounts of leisure time, changing roles of men and women, new knowledge about sex, and growing concern about sexually transmitted disease. Human Sexuality looks at sexual attitudes and practices across the diverse cultures of the world in order to develop a knowledge and understanding of the complexity of sexual behavior within societies and within ourselves. (48/0)

PSY:269 Social Science Research and Reasoning 4 Credits
Introduces research strategies and measurement tools used in social science fields. Reviews scientific method and standards of ethical research conduct. Studies scientific writing techniques including APA style research report and will practice searching related literature. Surveys basic non-experimental research strategies including naturalistic observation, surveys, focus groups, and archival research.(64/0) Prerequisites: MAT:156, PSY:111

*PSY:281 Educational Psychology 3 Credits
The principles of psychology are applied to educational settings in such areas as human development, learning, motivation, testing and measurement, and conditions that facilitate learning. This course recognizes that today's educators are faced with great diversity in student needs as well as techniques of meeting these varied educational needs. The task of educating special needs students requires educators to be more broadly diverse in techniques and principles that will assist in the learning process. (48/0) Prerequisite: PSY:111 or PSY:121

*PSY:285 Education of Exceptional Learners 3 Credits
A sound and comprehensive introduction to the study of exceptionalities throughout the life span. It may include the study of the causes of exceptionalities, the characteristics of exceptional persons, intervention strategies, services provided for special populations, trends, future perspectives, and issues that affect exceptional individuals. "The study of exceptionality is the study of individuality." (Lynch and Lewis) (48/0)

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*PSY:294 Crisis Intervention 3 Credits
(Also listed as HSV:270) Provides theoretical and historical information regarding the development of crisis intervention. Offers opportunities to learn and practice specific skills and techniques for diverse crisis situations, especially those applicable to working with persons with psychological disorders, as well as exploring the behavioral, legal, ethical, and cultural implications for interventions. The most common types of crisis will be investigated as well as safety guidelines and stress management techniques for crisis intervention workers. (48/0) Pre-/corequisite: PSY:111 or SOC:110

RAD: RADIOLOGIC TECHNOLOGY

RAD:101 Radiographic Patient Care 3 Credits
Teaches proper patient communication and safety techniques as well as basic nursing procedures. Students learn how to read medical charts and differentiate between common medical emergencies that take place in radiology departments. (48/0) Corequisite: RAD:200

RAD:121 Radiographic Procedures I 3.5 Credits
Fundamentals and theoretical principles of various radiographic procedures. Covers basic routine and alternative positions. Radiographic categories covered are chest, abdomen, upper and lower extremities. Presents basic principles of radiation protection procedures. Students will identify the anatomy associated with each unit. Course must be taken concurrently with Clinical Education I. Information in both courses is interrelated. (40/32) Corequisites: BIO:165, RAD:200

RAD:145 Radiographic Procedures II 3 Credits
A continuation of Radiographic Procedures I. Covers basic routine and alternative radiographic procedures. Units include lower extremities, pelvis, spine, cranium, gastrointestinal, and urinary system. Course must be taken concurrently with Clinical Education II. Information in both courses is interrelated. (32/32) Prerequisites must be passed with a minimum grade of C-. Prerequisites: RAD:121, RAD:200. Corequisite: RAD:240. Pre-/corequisites: BIO:170, BIO:172

RAD:185 Special Procedures and Pharmacology 3 Credits
Encompasses radiographic studies of the circulatory, skeletal, lymphatic, digestive, reproductive, and central nervous systems. Presents those radiographic procedures considered special studies and which require in-depth knowledge. (48/0) Prerequisites: A minimum grade of C- in BIO:170, BIO:172, RAD:145. Corequisite: RAD:520

RAD:200 Clinical Education I 3 Credits
Clinical practice in applying principles and skills learned in the classroom and laboratory. Under direction of the instructor and/or registered radiologic technologist, the student demonstrates skill with basic radiographic procedures. (144 clinical hours) Corequisite: RAD:121. Course must be taken concurrently with RAD:121 as information in both is interrelated.

RAD:240 Clinical Education II 5 Credits
A continuation of Clinical Education I to broaden practical experience. Students perform more independently as they complete competency testing. (240 clinical hours) Prerequisites must be passed with a minimum grade of C-. Prerequisites: BIO:165, BIO:167, HSC:117, RAD:101, RAD:121, RAD:200. Pre-/corequisite RAD:145

RAD:280 Clinical Education III 5 Credits
A continuation of Clinical Education II with the student functioning more independently, and demonstrating capabilities of performing the procedures learned in Radiographic Procedures I and II. (240 clinical hours) Prerequisites: A minimum grade of C- in BIO:170, BIO:172, RAD:145, RAD:240

RAD:410 Introduction to Specialized Imaging 1 Credit
Introduces all of the specialized modalities found in imaging departments. Basic terminology, equipment, and common procedures are discussed. (16/0) Prerequisite: RAD:240

RAD:420 Radiographic Physics 4 Credits
A study of basic radiographic physics including atomic structure, concepts of radiation, and electromagnetic radiation. As the course progresses, radiation production and the construction of an x-ray tube and circuit are presented. Course requires the use of advanced math and equations. (64/0) Prerequisites: A minimum grade of C- in RAD:240, RAD:440

Key:
**College or university lower-division coursework*
***Foundation-building (developmental) courses*
****Life Skills courses*

RAD:440 Image Evaluation 4 Credits
Radiographic images are evaluated for proper positioning, anatomy and technical factors. The influence of pathology, patient motion, patient habitus, and equipment control are included as to effects on the radiograph. Students evaluate radiographs associated with different areas of the body as to diagnostic quality. (64/0) Prerequisites: A minimum grade of C- in BIO:165, BIO:167, RAD:121. Corequisite: RAD:240

RAD:520 Clinical Education IV 7 Credits
A continuation of Clinical Education III designed to enhance clinical skills and capabilities. Students will begin rotations through various imaging modalities. (336 clinical hours) Prerequisite: A minimum grade of C- in RAD:280

RAD:560 Clinical Education V 7 Credits
A continuation of Clinical Education IV. Students will continue to rotate through various imaging modalities. (336 clinical hours) Prerequisite: A minimum grade of C- in RAD:520

RAD:590 Clinical Education VI 3.5 Credits
A continuation of Clinical Education V. Students will continue to rotate through various imaging modalities. Students must complete all competency testing and be able to perform routine radiographic procedures as entry-level radiographers. (168 clinical hours) Prerequisite: A minimum grade of C- in RAD:560

RAD:660 Comprehensive Radiologic Review 2.5 Credits
An overview of all aspects of radiologic technology. Various tests are given covering the sections on the registry examination. (32/16) Prerequisites must be passed with a minimum grade of C-. Prerequisites: All courses in previous five semesters

RAD:709 Radiographic Image Exposure 3 Credits
Covers darkroom chemistry, automatic processing, processing systems, film artifacts, processor malfunctions, grids and radiographic exposure factors. Students will submit a project and/or term paper to reinforce their understanding of the material presented. (40/16) Prerequisites: A minimum grade of C- in RAD:240, RAD:440

RAD:710 Radiographic Image Exposure 4 Credits
Covers darkroom chemistry, automatic processing, processing systems, film artifacts, processor malfunctions, grids and radiographic exposure factors. Students will submit a project and/or term paper to reinforce their understanding of the material presented. (48/32) Prerequisites: A minimum grade of C- in RAD:240, RAD:440

RAD:711 Radiographic Digital Imaging 1 Credit
Introduces digital applications of radiology. Issues in Computer Radiography and Digital Radiography are taught as well as an overview of PACS (Picture Archiving Communication Systems). (16/0) Prerequisites: A minimum grade of C- in RAD:280 and RAD:420 or current ARRT registration

RAD:720 Radiographic Imaging 3 Credits
Course involves the functions and operation of various types of radiographic equipment including tomography, phototiming, special procedures, fluoroscopy, and mobile equipment. Presents methods of quality assurance tests for radiographic equipment and processors. Emphasizes the importance of maintaining records and performing quality assurance tests. (48/0) A minimum grade of C- in RAD:185, RAD:520, RAD:709

RAD:740 Radiographic Pathology 2.5 Credits
Emphasizes common pathological disorders of the different systems of the human body. Radiographs exemplifying pathological disorders will be supplemented. (40/0) Prerequisites: A minimum grade of C- in BIO:170, BIO:172, HSC:117, RAD:520. Corequisite: RAD:560

RAD:860 Radiobiology and Radiation Protection 2.5 Credits
The effects of ionizing radiation to the human body and methods of radiation protection for the general population and radiation workers, along with federal and government standards. (40/0) Prerequisites: A minimum grade of C- in RAD:280, RAD:420. Corequisite: RAD:520

Key:
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****Life Skills courses*

RCP: RESPIRATORY THERAPY

RCP:270 Respiratory Therapy Techniques I 8 Credits
Combines theory, laboratory practice, and clinical experience in medical gas therapy, basic pharmacology, aerosol and humidity therapy, bronchial hygiene, and general patient assessment skills. (64/64 and 96 clinical hours)

RCP:320 Respiratory Therapy Science I 3.5 Credits
A basic foundation of chemistry, physics, microbiology, mathematics, and anatomy and physiology of the cardiopulmonary system as applied to respiratory therapy. (40/32)

RCP:350 Pulmonary Pathology 3 Credits
A overview of acute and chronic diseases affecting the pulmonary system, outlining diagnosis prevention and treatment. (32/32) Prerequisites: A minimum grade of C- in BIO:165, BIO:170, RCP:460, RCP:540

RCP:460 Respiratory Science II 3.5 Credits
Basic knowledge of respiratory and circulatory physiology, including evaluation of acid-base status and pulmonary function testing. (32/48) Prerequisites: A minimum grade of C- in BIO:165, BIO:167, RCP:270, RCP:320

RCP:490 Respiratory Therapy Science III 6 Credits
Theory and experience in EKG interpretation and treatment of abnormal rhythms. Provides an overview of the fundamentals of alternate site care. (16/32 and 192 clinical hours) Prerequisites: A minimum grade of C- in RCP:460, RCP:540

RCP:540 Respiratory Therapy Techniques II 8 Credits
Combines theory, laboratory practice, and clinical experience in hyperinflation therapy, airway care, manual resuscitation, ventilator management, and non-invasive positive pressure ventilation. (32/64 and 192 clinical hours) Prerequisites: A minimum grade of C- in BIO:165, BIO:167, RCP:270, RCP:320

RCP:600 Neonatal/Pediatric Respiratory Therapy 3 Credits
Care and treatment overview of neonatal, pediatric respiratory, and cardiac illness. (32/32) Prerequisites: A minimum grade of C- in BIO:170, BIO:172, RCP:350, RCP:490

RCP:820 Respiratory Therapy Techniques IV 7.5 Credits
Combines theory and clinical experience in evaluation and treatment of pathological conditions affecting the respiratory system, pharmacological principles, hemodynamic monitoring, and an overview of cardiovascular surgical procedures and equipment. (16/48 and 240 clinical hours) Prerequisites: A minimum grade of C- in BIO:170, BIO:172, RCP:350, RCP:490

RCP:830 Respiratory Therapy V 12 Credits
Combines theory and clinical experience in evaluation and treatment of pathological conditions affecting the respiratory system, application of pharmacologic agents and monitoring, and neurological assessment. Also covers pulmonary rehabilitation, nutritional assessment, and cardiopulmonary stress testing principles. (80/0 and 336 clinical hours) Prerequisites: A minimum grade of C- in RCP:600, RCP:820

RCP:840 Innovations in Respiratory Care 5.5 Credits
Information on new and innovative techniques in the field of respiratory therapy for the adult, neonatal, and pediatric patient. (88/0) Prerequisites: A minimum grade of C- in RCP:600, RCP:820

REL: RELIGION

*REL:105 Introduction to Religion 3 Credits
Topical introduction to the study of religion, exploring the human search for the holy or ultimate. Through descriptions and analysis of the dimensions of religious expression common to all religious traditions, students develop an understanding of the phenomena of religion using examples from different religious traditions as well as from literature and philosophy. (48/0)

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****Life Skills courses*

SCI: SCIENCE

**SCI:001 Science Enrichment 3 Credits
Fundamental concepts of science and the scientific process through lecture methods and participation in experiments. Designed to facilitate further interest and/or study in science for students with little or no previous experience in science. (48/0)

SDV: STUDENT DEVELOPMENT

***SDV:001 New Student Orientation 0 Credit
College is a new and different experience for many students. This half-day program familiarizes new students with expectations and opportunities within the college environment. Topics relating directly to success in college include information specific to NICC college resources and support services, a review of important test-taking and study skills, academic advising and registration processes, library services, career and transfer counseling, and financial assistance. (4/0)

***SDV:055 Test-Taking Workshop 0 Credit
Assists students with the critical thinking skills needed for NCLEX success. Reviews study skills, various approaches to cognitive question levels, principles of test taking emphasizing the NCLEX format of multiple choice, multiple-multiple, and fill-in-the-blank questions. Students learn to analyze their own tests taken and gain control over the testing situation. Weekly attendance is strongly encouraged. (32/0)

***SDV:060 Time and Stress Management1 Credit
Techniques to effectively manage time and to recognize and reduce stress. Emphasizes skills that can be applied to the workplace. (16/0)

***SDV:070 TRiO Student Success Seminar 1 Credit
Designed to help TRiO students identify and apply learning and reading strategies to successfully complete college courses. Students develop learning and reading strategies for each of the courses in which they are concurrently enrolled. The instructor monitors the students' progress in each class and helps them assess the effectiveness of their college success strategies applied to each course. (16/0)

***SDV:108 The College Experience 1 Credit
College is a new and different experience for many students. This course conveys expectations of the college culture to first-time college students. It provides an examination of the student's learning styles, familiarization with college resources and support services, review important study and test taking skills, development of goal setting and decision making skills, and enhancement of personal relationship skills that relate directly to college success. (16/0)

***SDV:130 Career Exploration 1 Credit
Provides help in choosing a career and in acclimating students to the college. (16/0)

***SDV:135 Job Seeking Skills 1 Credit
Students learn to assess personal strengths, develop job leads, complete applications, prepare resumes and letters, and use successful employment interviewing techniques. (16/0)

***SDV:153 Pre-Employment Strategies 2 Credits
Basic introduction to skills necessary for entry-level employment positions. Networking with local employers will be a key component. A work performance rating and a National Career Readiness Certificateä will be awarded based on WorkKeysâ testing results which will be recognized in interviewing and compensation practices of some local employers. Stresses options for continuing education through NICC programs. Students may choose to enter directly into the workforce upon course completion. (32/0)

***SDV:163 Credit for Life Experience Portfolio Development .5 Credit
To assist students applying for credit for life experience to complete a systematic approach to developing and submitting a portfolio for review for credit for life experience. (0/16)

***SDV:200 Introduction to Microcomputers 1.5 Credits
The basic concepts of information processing with "hands-on" experience on a computer. (8/34)
Prerequisite: Basic keyboarding skills

Key:
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***SDV:222 Coop Career Experience I 1 Credit
Obtaining employment without work experience is challenging and often frustrating for college graduates. Real-world experience is gained in fields of study through work experiences in business/organization settings. Students will enter their coop locations having completed the necessary application and orientation process. Three class meetings offer opportunity to share challenges, concerns, and learning as a result of the coop experience. Students will reflect on their learning through weekly journals and a goal-setting and reporting process. (64 co-op hours)

***SDV:223 Coop Career Experience II 2 Credits
Obtaining employment without work experience is challenging and often frustrating for college graduates. Real-world experience is gained in fields of study through work experiences in business/organization settings. Students will enter their coop locations having completed the necessary application and orientation process. Three class meetings offer opportunity to share challenges, concerns, and learning as a result of the coop experience. Students will reflect on their learning through weekly journals and a goal-setting and reporting process. (128 co-op hours)

***SDV:224 Coop Career Experience III 3 Credits
Obtaining employment without work experience is challenging and often frustrating for college graduates. Real-world experience is gained in fields of study through work experiences in business/organization settings. Students will enter their coop locations having completed the necessary application and orientation process. Three class meetings offer opportunity to share challenges, concerns, and learning as a result of the coop experience. Students will reflect on their learning through weekly journals and a goal-setting and reporting process. (192 co-op hours)

***SDV:949 Special Topics 1-3 Credits
Explores special topics of interest that augment existing courses.

SOC: SOCIOLOGY

*SOC:110 Introduction to Sociology 3 Credits
The basic sociological principles and basic processes of group behavior. Includes the study of social interaction, family and group life, social institutions, status and role, culture, population, structure and change, and community structures (both urban and rural). (48/0)

*SOC:115 Social Problems 3 Credits
An introduction to social problems as they relate to the individual, family, community, and culture. Students learn to identify these problems, define causative factors, and explore solutions. General areas studied include the foundations of social problems, problems of deviance, problems of inequality, problems of social institutions, and global social problems. (48/0)

*SOC:120 Marriage and Family 3 Credits
Approaches marriage and the family, or alternatives, from a multi-disciplined perspective to search for our humanness, our relationships, and our potentials. The significance and complexities of relationships encourage personal knowledge, reflection, and intellectual insight. (48/0)

SOC:121 Sociology of Families 3 Credits
Examines the unique realm of the family and emphasizes the family as a whole, focusing on the processes taking place within the family. (48/0)

*SOC:140 Human Behavior in the Social Environment 3 Credits
The study of why people behave as they do and the application of this knowledge to the professional practice of social work using an approach called a social systems model. (48/0) Prerequisite: PSY:111 or SOC:110

*SOC:208 Introduction to Cultural Anthropology 3 Credits
A holistic overview of the cultural anthropological perspective broadly describing what it means to be human. Emphasis is on culture, the learned behaviors and ideas that humans acquire as members of a society and use to adapt to and transform the world in which they live. Introductory-level topics include: the anthropological perspective; culture and the human condition; ethnographic fieldwork; history, anthropology, and the explanation of cultural diversity; language; cognition; play, art, myth and ritual; worldview; kinship; marriage and the family; relationships beyond kinship; social organization and power; subsistence or making a living; the world system; and anthropology in every day life. (48/0)

*SOC:209 Archeology 3 Credits
An introductory-level overview of historic archeological paradigms, principles, and practices. Includes the study of: different theoretical viewpoints current in historical archeology today (and past definitions of the field), historical archeology as anthropology, historic period

artifacts, temporal and spatial concepts, pre-fieldwork techniques, historic period field survey techniques, laboratory procedures, combining science and humanism, the archeology of groups, the global approach to historical archeology, the future of historical archeology and how individuals can become involved. (48/0)

*SOC:261 Human Sexuality 3 Credits
(Also listed as PSY:261.) Traditional sexual values and attitudes are being challenged by several factors including advances in medical science, greater amounts of leisure time, changing roles of men and women, new knowledge about sex, and growing concern about sexually transmitted disease. Human Sexuality looks at sexual attitudes and practices across the diverse cultures of the world in order to develop a knowledge and understanding of the complexity of sexual behavior within societies and within ourselves. (48/0)

*SOC:924 Honors Project 3 Credits
Focus on current issues affecting local, national, and global communities. Designed to be interdisciplinary, it includes perspectives from philosophy, history, geography, sociology, science, and psychology. Format includes scholarly discussion, research, and consolidation of concepts and theories. From inclusion of contemporary and historical perspectives will emerge deeper understanding of issues and complexities inherent in the progress of civilization. As points of view on issues are developed, students will articulate and defend these as they are challenged by others and will make judgments among alternative options. (48/0) Prerequisite: 3.0 GPA in a minimum of 12 credits of college transfer-level work, ENG:105

SPC: SPEECH

*SPC:112 Public Speaking 3 Credits
An introductory course emphasizing actual speaking experiences with practice in choosing subjects, analyzing audiences, and preparing and delivering a variety of extemporaneous speeches. Provides opportunity for skill development in listening and group discussion techniques. (48/0)

TRV: TRAVEL AND TOURISM

TRV:113 Introduction to Tourism 3 Credits
Introduces the structure and supply of domestic and international tourism, including accommodations, transportation, and other supply elements. Includes study of the economic impact and the future of tourism. (48/0)

TRV:114 Introduction to the Hospitality Industry 3 Credits
Introduces management and the hospitality industry and serves as a foundation for more specialized courses. The first part surveys the industry, nationally and locally. The second part provides an overview of the work hospitality managers perform. (48/0)

UTL: UTILITIES

UTL:100 Gas Utility Field Training I 4 Credits
An introductory laboratory course that prepares students for basic field utility work, including safety procedures and equipment operation. Focuses on hands-on application and is intended to help students become confident in safely-operating basic gas utility equipment. (16/96)

UTL:200 Gas Utility Field Training II 5 Credits
Practice in applied gas utilities tasks with a focus on installation. Job sheets are used to guide learning activities and to provide orderly and productive learning experiences. (16/128)

UTL:205 Electronic Controls 4 Credits
Basic knowledge on the installation and maintenance of Electronic Flow Computers, including SCADA (supervisory control and data acquisition) and Telemetry systems. Covers the installing and maintaining of the different types of electronic control systems. (32/64)

UTL:210 Pipeline Integrity 3 Credits
The basic knowledge of pipeline integrity management principles along with regulation code requirements. (16/64)

Key:
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****Life Skills courses*

UTL:220 Regulation and Measurement 3 Credits
A laboratory course introducing the importance of regulation and measurement in the natural gas industry. (16/64)

UTL:230 Gas Appliances 3 Credits
The basic knowledge of gas appliances. Covers electrical components and safety standards. Introduces necessary codes of the industry as well as operation sequencing. (16/64)

UTL:240 OQ Modules (Operator Qualification) 3 Credits
Instruction on the required OQ Modules pertaining to each job classification in the natural gas industry, AOC's (Abnormal Operating Conditions), and personnel safety. (16/64)

UTL:250 Gas Utilities Internship 5 Credits
A broad overview of practical experiences to be encountered upon entrance to the workforce. Students may choose to specialize an area they have been trained on, or they could intern in several or all areas available to them. Before placement with an employer, students will go through a resume/interview process. (320 co-op hours)

UTL:300 Gas Utility Field Training III 5 Credits
Practice in applied gas utilities tasks focusing on steel gas piping and customer service. Job sheets are used to guide learning activities and to provide orderly and productive learning experiences. (16/128)

UTL:400 Gas Utility Field Training IV 4 Credits
Practice in more advanced gas utilities applications with a focus on gas appliances. Job sheets are used to guide learning activities and to provide orderly and productive learning experiences. (16/96)

VIN: VITICULTURE

VIN:190 Viticulture Safety 1 Credit
Introduces safety and procedures specific to viticulture (grape growing). Includes a general history of agricultural safety and health issues, ergonomics, OSHA safety rules and safety issues, and concerns specific to viticulture. (16/0)

VIN:266 Sensory Evaluation 3 Credits
Develops understanding of sensory evaluation principles used in commercial wine making. It will benefit the student interested in reading advanced levels of wine and wine sensory appreciation, as well as the producer, the wine merchant, and ultimately the enologist who by the nature of their professions need to discern flavors and establish tasting benchmarks. Sensory kits and workshops will be utilized to further sensory evaluation skills and techniques. (32/32) Prerequisite: VIN:146 (VESTA course) or instructor approval

VIN:290 Enology Safety 2 Credits
Introduces safety and procedures specific to enology (wine making). Includes a general history of food and beverage safety and health issues, ergonomics, OSHA safety rules and safety issues, and concerns specific to winery. (24/16)

WEL: WELDING

WEL:110 Welding Blueprint Reading 2 Credits
Introduces the concept and practice of blueprint interpretation as needed by welders in an industrial setting. Emphasis is on the basics of interpretation and application in specific situations. (16/32)

WEL:119 Maintenance Welding 1 Credit
Basic welding techniques, brazing, soldering, and types of welds needed in the industrial maintenance field, including the use of oxyacetylene and electric welding equipment. (0/30)

WEL:120 Oxyacetylene Fuel Welding and Cutting 2 Credits
The history and principles of oxyacetylene welding, as well as the nomenclature of the equipment. Practices welding procedures such as puddling, carrying the puddle, cutting, beveling plates, and scarfing plates and welds. (16/32)

WEL:131 Oxyacetylene Welding 3 Credits
The history and principles of oxyacetylene welding, as well as the nomenclature of the equipment. Welding procedures such as puddling, carrying the puddle, cutting, beveling plates, and scarfing plates and welds are practiced. (16/48)

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WEL:154 Introduction to Arc Welding (SMAW) 4 Credits
The operation of AC transformers and DC motor generating arc welding machines. Studies welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order to detect weaknesses in welding. Emphasizes safety procedures in tool and equipment use. (32/64)

WEL:175 Advanced Arc Welding (SMAW) 2 Credits
Builds skills through practice in simulated industrial processes and techniques, sketching and laying out size and shape descriptions, and listing the procedural steps necessary to build the product. Emphasizes maintenance, repairing worn or broken parts by special welding applications, field welding, and nondestructive tests and inspection. (16/32)

WEL:186 Gas Metal Arc Welding (GMAW) 4 Credits
A study of gas metal arc welding (MIG) and other related processes. Studies topics such as process variation, welding in various positions, principle of operation, shielding gases, and wires. Stresses safety and practical application of these welding processes. (32/64)

WEL:190 Gas Tungsten Arc Welding 2 Credits
Gas tungsten arc welding (TIG), and other related processes. Studies topics such as process variation, welding in various positions, principle of operation, shielding gases, and filler rods. Stresses safety and practical application of these welding processes. (16/32)

WEL:200 Metallurgy Fundamentals 2 Credits
Studies the physical and mechanical properties of engineering materials and their use in mechanical application. Metallurgical laboratory work is performed to acquaint students with stress, strain, hardness, shear, compression, and microstructure. (16/32)

WEL:301 Pipe Welding 2 Credits
Practice in the welding of pressure pipe in horizontal, vertical, and horizontal fixed positions using shielded metal arc welding processes as well as MIG and oxyacetylene welding. Testing to ASME code is discussed. (16/32) Prerequisite: Instructor approval

WEL:303 Pipe Welding/SMAW 3 Credits
Practice in welding pressure pipe in horizontal, vertical, and horizontal-fixed positions using shielded metal arc welding processes, MIG, and oxyacetylene welding. Discusses testing to ASME code. Students will become proficient in specific applications of pipe welding to the gas utilities industry. (16/64) Prerequisite: Instructor approval

WEL:329 Shop Welding 1 Credit
Electric arc and oxyacetylene welding used in the repair of farm equipment. Horizontal lap, butt, and "t" welds are made using both electric arc and oxyacetylene welders. Practices use of the cutting torch and brazing. (8/16)

WEL:330 Welding Fundamentals 1 Credit
Use of oxyacetylene and electric arc welding equipment to make different types of welds required to repair or fabricate items. Experience in various techniques of welding, brazing, and soldering. (0/32)

WEL:390 Weld Lab I 5 Credits
Practice in welding procedures using job sheets to guide learning activities and to provide orderly and productive learning experiences. (0/160)

WEL:391 Weld Lab II 5 Credits
Practice in welding procedures using job sheets to guide learning activities and to provide orderly and productive learning experiences. Prerequisite: WEL:390 (0/160)

WEL:801 Supervised Welding On-The-Job Training 5 Credits
Opportunity to utilize practical hands-on application of welding theory that occurs in an industrial setting. Prerequisites: WEL:154, WEL:190 (160 co-op hours)

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****Life Skills courses*

Faculty & **Professional Staff**

student driven...community focused

2008-2009

Abbott, William (P) x272
Instructor, Radiologic Technology
A.A.S., Belleville Area College

Adams, Tina (P) x304
Instructor, Dental Assisting
C.D.A., Northeast Iowa Community College
B.A., University of Iowa

Africa, Jeanne (C) x 261
Instructor, Nursing
B.S.N., University of Iowa

Alexander, Hilaree (C) x428
Instructor, Nursing
B.S.N., University of Iowa

Anderson, Laurie (P) x276
Instructor, Dubuque Learning Center
B.A., Clarke College
M.S., University of Wisconsin-Platteville

Anglin, Jayne (P) x346
Instructor, Dental Assisting
Diploma, Northeast Iowa Community College

Arensdorf, Phil (P) x327
Continuing Education Program Manager
EMT-P, Mercy Health Center
B.S., Loras College

Avenarius, Daniel (P) x205
Dean, Business & Computer Science
B.A., Loras College
M.S., University of Wisconsin-Platteville

Arnburg, Eugene (C) x408
Instructor, Electrical

Backes, Gail (C) x273
Instructor, Computers
A.A.S., Northeast Iowa Community College

Baker, Hillary (P) x296
Grant Writer
A.S., College of DuPage
B.A., Augustana College

Balk, Sharon (C) x334
Instructor, Math
B.A., University of Northern Iowa

Balk, Terry (C)
Instructor, Math
B.A., University of Northern Iowa

Bateman, Steve (P) x270
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M.S., University of Wisconsin/Platteville

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Financial Aid Officer
B.B.A., Mount Mercy College

Beadle, Kathryn (P) x389
High School Relations Coordinator
B.A., University of Northern Iowa

Beck, Paul (P)
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B.S., Loras College
M.A.E., Loras College

Becker, Sheila (P) x295
Registrar
A.A., Northeast Iowa Community College
B.A., Loras College

Benedict, Cindy (P) x406
Director, TRiO SSS
B.A., Michigan State University
M.A., University of Northern Iowa

Berland, Paul (C) x
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B.S., University of Wisconsin-Stevens Point
M.S., College of Charleston

Bernatz, Ruth (C) x261
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A.D.N., Northeast Iowa Community College

Berryman, Thomas (P) x270
Instructor, Humanities
B.A., University of the State of New York
M.A., Loras College

Besler, Lynn (P) x295
Academic Advisor
B.A., University of Northern Iowa

Besler, Jodee (P)
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Beyer, Brent (C)
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M.B.A., University of Iowa

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Instructor, Communications
B.A., Clarke College
M.A., Clarke College

Bjerke, Victoria (C) x267
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B.A., University of Wisconsin – Stevens Point
M.B.A., University of Wisconsin – LaCrosse
Ph.D., Capella University

Bleile, Jodee (P) x204
Instructor, Nursing
B.S., College of St. Francis

Blok, Robert (P) x208
Instructor, Computer Science
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M.B.A., University of Dubuque
M.S., Kennedy Western University

Bolsinger, Dennis (C) x344
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M.S., University of Nevada-Las Vegas

Bosworth, Kimberly (C) x235
Dean, Arts & Sciences
B.A., Buena Vista University
M.A., University of Northern Iowa

Bouska, Duane (C) x385
Instructor, John Deere Ag Tech
Diploma, NICC
John Deere Electrical and Hydraulic Certifications

Boylen, Kelli
Dairy Foundation Director
Dairy Center 866.474.4692
B.A., University of Wisconsin-Platteville

Brand, Mary (P) x204
Instructor, Nursing
A.D.N., Northeast Iowa Community College
B.S.N., Viterbo College

Brimeyer, James (P) x285
Instructor, Communications
B.A., Loras College
M.A., Loras College

Brockman, Heather (P) x328
Instructor, Communications
A.A., Northeast Iowa Community College
B.A., University of Dubuque
M.A., University of Dubuque

Brockway, Kristi (C) x225
Continuing Education Program Manager
IA Paramedic Certification
B.A., University of Northern Iowa

Brown, Dawn (C) x342
Instructor, Alternative HS Learning Center
B.A., Wartburg College

Buechele, Karen (P) x357
Instructor, Alternative High School
B.A., University of Northern Iowa
M.A., University of Iowa

Burds, Terry (P)
Instructor, Carpentry
Certificate, US Army Corps of Engineers

Burke, Jay (C) x238
Instructor, John Deere Ag Tech
A.A.S., Northeast Iowa Community College
John Deere Consolidated Service Schools
John Deere Electrical and Hydraulic Certifications

Burns, Connie (C) x261
Instructor, Nutrition
B.A., Kansas State University
M.A., Kent State University

Butikofer, Kathleen (P) x360
Instructor, Learning Center
B.A., University of Northern Iowa

Butikofer, Merlin (P) x360
Instructor, Learning Center
B.S., Upper Iowa University
M.S., University of Wyoming

Cantine-Maxson, Susan (C)
Instructor, Communications
B.A., Wartburg College
M.A., University of Northern Iowa

Carter, Tassie (P) x204
Instructor, Nursing
A.A.S., Northeast Iowa Community College

Carthey, Joseph (C) x277
Instructor, Accounting Specialist
B.S., University of Minnesota
M.S., Winona State University

Chapman, Dennis (C) x245
Instructor, Automotive Technology
B.S., Hamilton University
A.S.E. Certified Master Auto Technician
ICAR Certified Unibody Collision Instructor
ICAR Certified Advanced Vehicle Systems

Chesterman, Carol (P) x315
Chairperson, Nursing
B.S., Upper Iowa University
M.S.N., University of Iowa

Clausen, Patricia (C)
Instructor, Communications
B.A., University of Northern Iowa
M.A., University of Northern Iowa

Cleveland, Heather (C) x442
Instructor, Nursing
B.S.N., Allen College of Nursing

Coffin, Jim (C)
Instructor, Ag
Bailey Technical Schools
International Harvester Schools
John Deere Consolidated Service Schools
John Deere Electrical and Hydraulic Certifications

Collins, DeeDee 641.394.4689
Coordinator, Chickasaw Center
B.A., Buena Vista College

Cooper, Jeff (C) x407
Instructor, Electrical

Craft, Sondra (C) x 273
Instructor, Communications & Government
B.A., Buena Vista College
M.S., Illinois State University

Crandall, Tamara (C) x261
Instructor, Nursing
A.A.S., Northeast Iowa Community College

Crawford, Pamela (P) x270
Instructor, Humanities
B.S., Iowa State University
M.M.E., Drake University

Cross, Gary (C) x403
Instructor, Computer/Computer Technology
A.S.S., Indiana Vocational Technical College
B.A., Indiana University

Dalziel, Brian (TCC) x250
Regional Director, NE Iowa Business Accelerator
B.S., University of Iowa

Davidson, Karen (C) x257
Coordinator, Learning Resources
B.A., St. Olaf College
M.A., University of Iowa

Davis, Cathy (P) x 519
Instructor, Nursing
A.D.N., Northeast Iowa Community College
B.S., College of St. Francis
M.S., CA College Health Sciences

Davis, Kathryn (P) x215
Counselor
B.A., Clarke College
M.A., Loras College

Davis, Michelle (C)
Instructor, Math
B.S., Loras College
M.A., The Franciscan University of the Prairies

Davison, Kristine (P) x222
Instructor, Nursing
A.D.N., Northeast Iowa Community College
B.S.N., Clarke College

DeWitt, Marilyn (C) x261
Instructor, Consortium, Nurse Aide
A.D.N., Hawkeye Community College

Dick, Joyce (P) x241
Instructor, Computer Science
B.A., University of Dubuque
M.S., Johns Hopkins University

Didier, Marcel (P) x 208
Instructor, Business
B.A., University of Detroit
M.B.A, University of Dubuque

Doerr, Jeffrey (P) x384
Continuing Education Program Manager
EMT-P, Mercy Health Center

Doffing, Tim (P) x236
Instructor, Math
B.A., St. Mary's College
M.S., University of Iowa

Donlon, Cheryl (C) x110
Dairy Center 866.474.4692
Instructor, Science
B.A., Luther College
M.S., University of Iowa

Dougherty, John (P) x271
Instructor, Welding
Diploma, Northeast Iowa Community College

Ellingson, Rebecca (C) x406
Instructor, Nursing
A.D.N., Northeast Iowa Community College
B.A., University of North Carolina

Elsbernd, Julie (C)
Instructor, Cosmetology
Diploma, Northeast Iowa Community College

Elwood, Susan (C) x422
Instructor, Office Technology
B.A., Concordia College
M.S., Mankato State University

Entringer, Chris (P) x297
Employment and Career Services Manager
B.A., Loras College
M.A.E., University of Northern Iowa

Ernst, John (C) x293
Instructor, Humanities
B.A., Concordia College
M.A., University of Minnesota
M.A., Wheaton Graduate School
Ph.D., University of Minnesota

Everist, Burton (P) x270
Instructor, Humanities
A.A., California Concordia College
B.A., Concordia Senior College
M.D., Concordia Seminary

Ferrie, Jill (C) x302
Director of Distance Learning
B.A., University of Puerto Rico
M.A., University of Puerto Rico

Flanscha, Jessica (C) x261
Instructor, Nursing
A.A.S., Northeast Iowa Community College
B.S., University of Phoenix

Flaskerud, Christine (C) x430
Instructor, Nursing
L.P.N., Madison Area Technical College
A.D.N., Northeast Iowa Community College
B.S.N., Allen College

Fransen, Jolene (P) x338
Instructor, Respiratory Care
Diploma, Northeast Iowa Community College

Franzen, Monica (C)
Instructor, Communications
B.A., Luther College
M.A., University of Northern Iowa

Franzen, Nancy (C) x261
Instructor, Clinical Nursing
A.D.N., Northeast Iowa Community College

Frasher, Lisa (P) x204
Instructor, Nursing
B.S.N., Mount Mercy College

Frazee, DeAnn (C)
Instructor, Nurse Aide
A.D.N., Kirkwood Community College

Frick, Sue (C)
Instructor, Massage Therapy
Capri College

Friederich, Joyce (C)
Instructor, Nurse Aide
A.D.N., Northeast Iowa Community College

Frisch, Anita (P) x270
Instructor, Spanish
B.A. University of Northern Iowa

Fulton, Mary Ellen (C) x405
Instructor, Mathematics
B.A., University of Iowa
M.B.A., University of Iowa

Gallagher, Lynn (P) x327
Director, TRiO Upward Bound
B.S., Mundelein College
M.S. Ed., University of Wisconsin

Gansen, Mavonne (P) x305
Instructor, Nursing
Diploma, Mercy School of Nursing
B.S.N., University of Dubuque
M.A., University of Iowa

Gardner, Cindy (P) x346
Instructor, Respiratory Care
Diploma, Northeast Iowa Community College

Gau, Michael (P) x207
Dean, Arts & Sciences
B.A., University of Iowa
J.D., University of Iowa

George, Julie (C)
Instructor, Science
B.S., North Dakota University
M.S., Yale University

Gerhard, Kelly (P) x291
Instructor, Computer
B.A., Clarke College

Gesing, Gena (C)
Tech Prep Coordinator
B.A., Central College

Gianino, Joe (P) x270
Instructor, Social Sciences
B.A., St. Louis University
M.Th., Aquinas Institute

Gibson, Joanne (P) x270
Instructor, Psychology
B.S., Wisconsin State University
M.A., University of Wisconsin

Giese, Bernadine (P) x208
Instructor, Office Technology
B.A., Clarke College

Gilmour, Nancy (C) x261
Instructor, Clinical Nursing
B.S.N., Aurora College

Gipp, Ranae (C) x372
Instructor, Learning Center/Communications/ Math
B.A., Luther College

Goodman, Catherine (P) x270
Instructor, Communications
B.A., Loras College
M.A., University of Dubuque

Gorun, Joel (P) x270
Instructor, Humanities
B.A., St. Mary's College
M.A.E., St. Mary's College
M.A., Manhattan College
Ph.D., University of Saint Mary of the Lake

Gossing, Steve (C) x393
Dept. Chair, Career & Technical Education
Diploma, Northeast Iowa Community College
John Deere Hydraulic Certification

Grant, Michelle (P) x246
Instructor, Health Information Technology
A.A.S., Kirkwood Community College

Graves, Lenny (C) x240
Dean, Career & Technical Education
B.A., Luther College
M.A., University of Iowa

Grube, Neil (C) x392
Instructor, John Deere Ag Tech
Diploma, Northeast Iowa Community College

Gunhus, Valerie (C) x284
Instructor, Social Science
B.A., Luther College
M.A., Marquette University

Guyer, Patti (C) x261
Instructor, Nursing
B.S.N., Mount Mercy College

C - Calmar Campus
800.728.2256

Hageman, Deb (C) x398
Instructor, Computer Technology
AAS, Northeast Iowa Community College
B.S., Upper Iowa University
M.A., Upper Iowa Univeristy

Hall, Joy (C)
Instructor, Computer
M.A., University of Northern Iowa

Hamann, Sandy (C)
Instructor, Psychology
B.A., Buena Vista College
M.S.W., Augsburg College

Hammer, Mette (C) x412
Instructor, Communications
B.A., Aarhus Universitet
M.A., University of Wisconsin-Madison

Hannan, Judith (P) x412
Coordinator/Instructor, Pave
B.A., University of Dubuque

Hannan, Lora (P) x346
Instructor, Radiologic Technology
A.S., Northeast Iowa Community College

Hanniford, Patrick TCC x276-388
Continuing Education Program Manager
B.A., Loras College

Harvey, Chris (C) x118
Dairy Center 866.474.4692
Instructor, Science
B.S., Iowa Wesleyan College
D.V.M., Iowa State University

Harvey, Helen (C) x105
Dairy Center 866.474.4692
Instructor, Science
B.A., Colorado College
M.S.E., University of Wisconsin, Platteville

Hasvold, Thomas (C) x273
Instructor, Spanish
B.A., University of Colorado
M.S., Iowa State University

P - Peosta Campus
800.728.7367

Havlik, Anna (C) x275
Instructor, Cosmetology
Diploma, Northeast Iowa Community College

Heathcote, Carla (P) x438
Instructor, Graphic Design
B.A., University of Iowa

Hedstrom, Lise (C) x398
Instructor, Communications
A.A., Ottumwa Heights College
B.A., William Penn College
M.A., Iowa State University

Heffernen, Laura (C) x261
Instructor, Nursing Clinical
B.S.N., University of Iowa

Hemesath, Carolyn (C) x278
Instructor, Health Information Technology
A.A.S., Northeast Iowa Community College

Herbst, Shea (P) x296
Associate Director of Marketing
B.A., Iowa State University

Hernandez, Carmen (P) x326
Instructor, Humanities
B.A., Loyola University
M.A., Loyola University

Herold, Heidi (C) x229
Coordinator, Financial Services
B.S., Upper Iowa University

Heying, Carolyn (C) x316
Instructor, Learning Center
A.D.N., Northeast Iowa Community College
B.S., Upper Iowa University

Hills, Todd (C) x246
Instructor, Automotive Technology
Diploma, Northeast Iowa Community College

Hoeger, Mary (P) x435
Instructor, Nursing
B.S., University of Dubuque
M.S., University of Iowa

Hohmann, Nancy (P) x293
Coordinator/Instructor, Pave
B.A., University of Northern Iowa
M.A., University of Northern Iowa

Holt, Lisa (C)
Instructor, Health Information Technology
Diploma, North Iowa Area Community College

Holthaus, Elaine (C) x261
Instructor, High School Consortium
A.D.N., Northeast Iowa Community College
A.A., Northeast Iowa Community College
B.S.N., University of Iowa

Hosch, Ann (P) x204
Instructor, Nursing
A.D.N., Northeast Iowa Community College

Howes, Kathy (C) x305
Instructor, Psychology/Education
B.S., Iowa State University
M.S., Winona State University

Huber, Dale (C) 563-547-3355, x110
Instructor, Welding, Cresco Center
B.A., University of Northern Iowa

Huerter, Wilfred (P) x208
Instructor, Accounting
B.A., Loras College

Huff, Vickie (P) x270
Instructor, Social Science
B.A., Loras College
M.A., Loras College

Huffman, Carla (P) x261
Instructor, Nursing
B.S., Allen College

Huinker, David (C) x242
Instructor, CAD
A.A.S., Northeast Iowa Community College

Huiskamp, Julie G. (C) x300
Director, Human Resources
B.A., University of Northern Iowa
M.A., University of Iowa

Hulsizer, John (P) x270
Instructor, Humanities
B.A., Tarkio College
M.A., Olivet Nazarene University
Ph.D., University of Dubuque

Humpal, Lois (C) x261
Instructor, Nursing
A.D.N., Northeast Iowa Community College
B.S.N., Luther College

Humphrey, Candace (P) x208
Instructor, Accounting
B.A., Eastern Illinois University
M.B.A., Eastern Illinois University

Hupfeld, Marilyn (C) x427
Academic Advisor
B.A., University of Iowa
M.A.E., University of Northern Iowa

Hvitved, Melissa (C) 563-547-3355
Coordinator, Cresco Center
B.A., University of Northern Iowa

Isaacson, Teresa (C) x261
Instructor, Nursing
A.D.N., Hawkeye Community College
B.S.N., University of Iowa

Jenkins, Terry (P) x257
Instructor, Math/Science
B.S., Iowa State University
M.A., University of Northern Iowa
Ph.D., University of Iowa

Jensen, Mike (P) x270
Instructor, Related Courses
B.S., Iowa State University

Jespersen, Margaret, CFCS (C) x220
Continuing Education Program Manager
B.S., South Dakota State University

Johnson, Barbara (C)
Instructor, Education
B.A., University of Northern Iowa
M.A., University of Northern Iowa

Johnson, Debra (P) x208
Instructor, Computer Science
B.S., University of Wisconsin-Platteville

Johnson, Michael (P) x204
Instructor, Nursing
A.A.S., Northeast Iowa Community College
B.S., Clarke College

Jones, Gregg (C)
Instructor, Massage Therapy
Diploma, Muscular Therapy Institute
B.A., Clarke College

Jones, Maura (C) x224
Continuing Education Program Manager
B.S., Merrimack College

Jungblut, Stacy (P) x204
Instructor, Radiologic Technology
A.S., Northeast Iowa Community College

Junko, Patricia (C) x 431
Instructor, Nursing
A.D.N., Rochester Community College
B.S.N., Upper Iowa University
M.S., Winona State University

Junko, Thomas (C) x243
Instructor, Electrical
A.A., Hawkeye Institute of Technology

Kamm, Rebecca (C) x269
Instructor, Communications
B.A., Wartburg College
M.A., University of Northern Iowa
Ed.D., University of Northern Iowa

Kammer, Tom (C) x308
IMEP Account Manager
B.A., University of Northern Iowa

Kelly, James (C)
Instructor, Science
B.S., Winona State University
M. Ed., Cameron University

Kemp, Maureen (P) x346
Instructor, Dental Assisting
Diploma, Northeast Iowa Community College

Kendall, Dawn 319.283.3010
Coordinator, Oelwein Center
B.S., Southern Illinois University

Kennicott, Michelle (P) x270
Instructor, Communications
B.A., University of Dubuque
M.A., University of Dubuque

Kerns, Connie (C) x 261
Instructor, Nursing
B.S.N., University of Iowa
M.A., University of Iowa

Keune, Martha (C) x307
Student Enrollment Manager
B.A., University of Northern Iowa

Kimball, Paul (P) x337
Instructor, Science
B.A., University of Northern Colorado
M.S., Northern Illinois University

Kitchen, Lisa (P) x204
Instructor, Nursing Clinical
A.D.N., Clarke College
B.S.N., Clarke College

Klimesh, Connie (C)
Instructor, Nursing
B.S.N., Viterbo University

Kluesner, Gloria (P) x227
Instructor, Dental Assisting
Diploma, Kirkwood Community College
C.D.A, Dental Assisting National Board
A.A.S., Kirkwood Community College
B.L.S., University of Northern Iowa

Knobloch, Brenda (C) 563.547.3355
Instructor, Psychology, Cresco Center
B.S., University of Iowa
M.S., Western Illinois University

Koppes, Gerald (P) x270
Instructor, Business & Psychology
B.A., Loras College
M.A., Loras College

Kramer, Jerome (P) x360
Instructor, Learning Center
B.S., Loras College

Kratz, Rosalyn (C) x334
Instructor, Learning Center and Math
B.S., Minnesota State University, Mankato

Kremer, Jodi (P) x405
Academic Advisor, TRiO SSS
B.A., Loras College

Kritz, Lisa (P) x204
Instructor, Nursing
M.A., University of Iowa
B.S.N., Grandview College

Kronlage, Angie (P) x311
Program Director/Instructor, Radiologic Technology
B.S., University of Iowa
M.A., Loras College

Kruse, Gary (P) x270
Instructor, Math
B.S., Loras College
M.S., University of Wisconsin-Milwaukee
M.A., Loras College

Kruse, Larry (P) x329
Instructor, Learning Center
B.A., Loras College
M.A., Notre Dame University

Kruse, Tracy (C) x251
Director of External Relations
B.A., University of Northern Iowa
M.B.A., University of Northern Iowa

Kuennen, Sue (C) x261
Instructor, First Aid/CPR
A.A., Northeast Iowa Community College
B.S.N., Allen College
M.S., University of Phoenix

Kurdelmeyer, Bob (C) x212
Telecommunications Coordinator
Certificate, Kirkwood Community College

Lahey, Patricia (P) x204
Instructor, Nursing
A.A.S., Northeast Iowa Community College
B.S.N., Graceland University

Lahey-Keppler, Gerarda (P) x258
Instructor, Psychology
B.A., Clarke College
M.A., Loras College

Lammer, Frank (P) x331
Instructor, Learning Center
B.A., Clarke College
M.A., University of Iowa

Lancaster, Georgianna (P) x 270
Instructor, Communications
B.A., Elmhurst College

Landsgard, Marie (C) x261
Instructor, Nursing
A.D.N., Northeast Iowa Community College

Langreck, Lou Ann (C) x277
Instructor, Accounting/Management/Computers
B.A., Luther College
M.B.A., Nova University

Laughead, Theresa (C) x282
Instructor, Psychology
B.A., Southern Illinois
M.A., University of Iowa
PHA, University of Iowa

Lawstuen, Dave (C) x112
Dairy Center 866.474.4692
Instructor, Dairy Science
Chair, Dairy Operations
B.S., University of Minnesota
M.S., University of Minnesota

Lechtenberg, Kathryn (C) x317
Academic Advisor
B.A., Luther College

Lee, Bruce (C)
Instructor, Criminal Justice
B.A., St. Cloud University
M.S., St. Cloud University

Leifeld, Janet (C) x258
Coordinator, Developmental Education
B.A., Luther College

Lembke, Jean (C) x 273
Instructor, Sign Language
B.A., University of Northern Iowa
M.A., Viterbo College

Lewis, Ruth (P) x346
Instructor, Dental Assisting
Diploma, Kirkwood Community College

Libke, Darrell (C) 563.637.2283
Instructor, Communications, Oelwein Center
B.A., Buena Vista College
M.A., University of Northern Iowa

Lovell, Mary (P) x208
Instructor, Office Technology
B.A., Clarke College

Luensmann, Jennifer (P) x346
Coordinator, Respiratory Care
A.A.S., Northeast Iowa Community College

Lux, Jacquelyn (P) x228
Instructor, Nursing / Psychology
B.A., Clarke College
M.A., Loras College

Luzum, Lyle (C) x255
Director, Computer Information System
B.A., Luther College

Lyness, James (P) x270
Instructor, Humanities
B.A., Loras College
M.A., University of Notre Dame
M.F.A., University of Notre Dame

Maddox, James (P) x 270
Instructor, Communications
A.A., Arapahoe Community College
B.A., University of Northern Colorado
M.A., Loras College

Mai, Marilee (C) x275
Instructor, Cosmetology
Diploma, Northeast Iowa Community College

Mamali, Catalin (P) x270
Instructor, Social Sciences
M.S., University of Bucharest Romania
Ph.D., University of Bucharest Romania

Manderfield, Lyndsey (C) x273
Instructor, Psychology
B.A., University of Northern Iowa
M.A., University of Northern Iowa

Manderscheid, Mark (P) x270
Instructor, Psychology
B.A., Loras College
M.A., Loras College

Marino, Susie (P) x332
Instructor, Learning Center
B.A., Loras College

Martin, Kristine (Oelwein)
Instructor, Alternative High School Learning Center
B.A., Upper Iowa University

Martin, Linzy (P) x208
Instructor, Paralegal/Criminal Justice
B.A., Upper Iowa University
J.D., Drake University

Martin, Patricia (C) x429
Instructor, Nursing
A.D.N., Northeast Iowa Community College
B.S.N., University of Dubuque
M.S., Winona State University

Martinson, Patsy (C) x260
Instructor, Massage Therapy
Certificate, Minnesota School of Massage & Bodywork

Massman, Sherry (C) x304
Coordinator, Adult ReEntry Nontraditional Career Program
B.A., Mount Mercy College

McAuliffe, Ron (P) x237
Instructor, Auto Mechanics
A.S.E. Certified

McCormick, Hollee (C) 563-568-3060
Coordinator, Waukon Center
Diploma, Northeast Iowa Community College
B.A., Luther College

McCraw, Jeffrey (P) x276-136
Instructor, Paralegal/Criminal Justice
B.A., University of Arizona
J.D., University of Arizona

McDonough, Joanie (P) x310
Instructor, Computer Science
B.S., Clarke College

McGuire, Stephen (P) x208
Instructor, Business
B.A., University of Illinois-Champaign
M.S., Chicago State University
J.D., I.I.T., Chicago-Kent Law School

McKeaige, Lori (DC) x276-132
ABE Supervisor
B.S., University of Dubuque

McShane, Shelley (C) x432
Instructor, Nursing
B.S., University of Iowa
M.S., University of Phoenix

Meltzer, Elaine (C) 563-568-3060
Instructor, Communications, Waukon Center
B.A., Queens College, New York
M.A., Queens College, New York

Mensen, Lisa (C) x261
Instructor, Nursing
B.S.N., Mount Mercy College

Meyer, Debra (P) x307
Instructor, Nursing
B.S.N., University of Iowa

Meyer, Janet (Jamie) (P) x208
Instructor, Business
B.A., University of Dubuque

Meyer, Nancy (C)
Instructor, Psychology
Diploma, St. Luke's School of Nursing
B.A., Upper Iowa University
M.A., University of Northern Iowa
Ph.D., Capella University

Meyer, Pat (C) x267
Instructor, Nursing
A.D.N., Northeast Iowa Community College

Meyer, Winnie (P) x282
Academic Advisor
B.A., Mount Marty College

Mihm-Herold, Wendy (D)
563.382.0457, x111
Iowa Workforce Development Regional Manager
B.S., Iowa State University
M.S., Drake University

Miller Sr., James (P) x270
Instructor, Math
B.S., Loras College

Miller, Lor (C) x203
Director, Institutional Research
B.A., University of Wisconsin-Madison
M.Ed., Viterbo University

Miller-Olinger, Heidi (C) x219
Continuing Education Program Manager
B.A., University of Northern Iowa

Mills, Barbara (P) x312
Instructor, Computer Science
B.S., Rockford College
B.G.S., Roosevelt University
M.S., Roosevelt University

Minnihan, David (P) x301
Instructor, Business/Marketing
B.A., Drake University
M.B.A., University of Phoenix

Minnihan, Penny (P) x208
Instructor, Business
B.A., University of Dubuque
C.P.A.

Mitchley-McAvoy, Joan (P) x240
Instructor, Economics
A.A.S., Northeast Iowa Community College
B.A., University of Dubuque
M.B.A., University of Dubuque

Moore, Lori (C) x104
Dairy Center 866.474.4692
Instructor, Science
B.S., Iowa State University
M.S., University of Northern Iowa

Moschel, Jeanette (C) x275
Instructor, Cosmetology
Diploma, Northeast Iowa Community College

Mueller, Lisa (C) x412
Instructor, Communications
B.A., Buena Vista College
M.E., College of St. Scholastica

Mueller, Tad (C) x111
Dairy Center 866.474.4692
Instructor, Agriculture Sales and Services
B.S., Iowa State University
M.S., Iowa State University

Muller, Mary (P) x204
Instructor, Nursing Clinical
B.S.N., Viterbo College

Munden Brown, Jane (C) x227
Coordinator, Graphic Design
B.A., University of Wisconsin-Stout

Murphy, Althea (C) x279
Instructor, Early Childhood
B.A., University of Northern Iowa
M.A., University of Saint Mary

Murphy, Elizabeth (P) x346
Instructor, Radiologic Technology
Diploma, University Hospital Madison

Murphy, Jeff (C) x447
Director, Financial Aid
Instructor, Communications
B.A., University of Northern Iowa
M.A., University of Northern Iowa

Murray, Roberta (C) x313
Economic Development Program Manager
B.A., Luther College

Nacos-Burds, Kathleen (P) x209
Dean, Nursing & Allied Health
B.S.N., College of St. Teresa
M.S.N., University of Minnesota

Needham, Joseph (C)
Instructor, Humanities, Psychology, & Sociology
B.A., University of Northern Iowa
M.A., University of Northern Iowa
Ph.D., University of Tennessee

Neenan, Dan (P) x248
NECAS Manager
EMT-P, Mercy Health Center

Nelson, Sally (P) x208
Instructor, Accounting
B.A., Simpson College

Noel, John (C) x202
Vice President, Finance & Administration
B.A., St. Olaf College
M.S., Carnegie Mellon University

Noethe, Lee (P) x211
Student Enrollment Manager
B.A., Loras College

Noethe, Rebecca (P) x275
Instructor, Nursing
A.A.S., Eastern Iowa Community College
B.S.N., Clarke College
M.S.N., Clarke College

Noonan, Timothy (P) x270
Instructor, Humanities
B.S., State University of New York
M.A., Western Illinois University

Norton, Mary Ann (P) x346
Instructor, Radiologic Technology
Diploma, Xavier Hospital

Oberbroeckling, Patricia (P) x235
Instructor, Computer Science
B.A., Clarke College

O'Brien, Susan (P) x309
Instructor, Early Childhood
B.A., Clarke College
M.A., University of Northern Iowa

O'Bryon, Cindy (P) x201
Peosta Campus Provost
Diploma, Iowa Methodist School of Nursing
B.S.N., Mount Mercy College
M.S.N., Drake University

O'Connell, Christopher (P) x302
Instructor, Science
B.S., Loras College
M.A.T., University of Iowa

O'Hea, Barbara (P) x284
Assoc Director of NICC Foundation
B.A., Loras College
M.Ed., Iowa State University

C - Calmar Campus
800.728.2256

P - Peosta Campus
800.728.7367

Odefey, Nancy (P) x542
Instructor, Radiologic Technology
Diploma, Mercy Health Center

Oden, Nicole (C) x261
Instructor, Nursing
A.D.N., Northeast Iowa Community College
B.S.N., University of Iowa

Ohnesorge, Bruce (P) x328
Economic Development Program Manager
B.G.S., Chaminade University

Olberding, Carolyn (P) x372
Manager, Driving Program
B.A., University of Northern Iowa

Oldfield, Curt (P) x135
Vice President, Academic Affairs
B.S., Illinois State University
M.S., University of Illinois-Urbana

O'Neill, Margie (C) x418
Instructor, Nursing Chair
A.D.N., Northeast Iowa Community College
B.S.N., University of Iowa

Olufsen, Chantel (C)
Academic Advisor, TRiO Upward Bound
B.A., Luther College

Onsager, James (P) x244
Instructor, Office Technology
B.S., Mount Mercy College
M.A., University of Northern Iowa

Orr, Robert (P) x250
Instructor, Heating and Air Conditioning
Diploma, Eastern Iowa Community College

Osterhaus, Patrick (P) x233
Instructor, Diesel Mechanics
Diploma, Northeast Iowa Community College

Ostwinkle, Christopher (P) x256
Instructor, Psychology
A.A., Northeast Iowa Community College
A.S., Northeast Iowa Community College
B.A., Loras College
M.A., Loras College

Overvaag, Trisha (C) x261
Instructor, Clinical Nursing
A.D.N., Iowa Central Community College

Overlie, Warren (C) 563.547.3355
Instructor, Humanities, Cresco Center
A.A., Waldorf College
B.A., Concordia College
M.A., University of Minnesota

Parnow, Tom (P) x334
Instructor, Mathematics
A.A.S., Western Wisconsin Technical Institute
B.S., University of Wisconsin
M.S., University of Wisconsin

Perkins, Amy (C) x273
Instructor, Humanities
B.A., University of Clarksville, TN
M.Div., Union Theological Seminary

Perkins, Matthew (C) x273
Instructor, Humanities
B.A., University of Connecticut
M.Div., Lancaster Theological Seminary

Perry, Eugene (P) x292
Instructor, Humanities
B.S.Ed., Ohio University
M.A.C., University of Dubuque
M.Div., University of Dubuque
Theological Seminary

Peterson, Linda M. (P) x267
Dean, Student Services
B.A., University of Northern Iowa
M.A., University of Northern Iowa
Ph.D., Iowa State University

Phillips, Katie (C) x538
Academic Advisor
B.A., Upper Iowa University

Piittmann, Gerald (C) x273
Instructor, Humanities/Art
B.A., University of NW Missouri
M.A., University of Northern Colorado

Piper, Mary (Elkader)
Instructor, Alternative High School Learning Center
B.S., Iowa State University

Polfer, Terri (C) x261
Instructor, Nursing
A.D.N., Northeast Iowa Community College

Popp, Kara (P) x230
Director, Student Life, Diversity, & Leadership
B.A., Carthage College
M.S., Minnesota State University

Priebe, Joe (P) x339
Instructor, Sociology
B.A., Winona State University
M.A., University of Northern Iowa

Prosch, Arnold (P) x239
Instructor, Related Courses
Degree., Hutchinson Technical College
ASNT Level III Certification
B.S., Upper Iowa University
M.S., Iowa State University

Raisbeck, Lori (P) x346
Instructor, Radiologic Tech Clinical
B.S., University of Wisconsin-Madison
A.R.R.T. Certified

Rausch, Amy (P) x274
Program Director/Instructor, Respiratory Care
A.A.S., Northeast Iowa Community College
B.S., Western International University

Reisen, Amy (P) x204
Instructor, Nursing
B.S.N., Hawaii Pacific University

Ressler, Linda (P) x281
Coordinator, Computer Network
B.A., Clarke College

Rice, Michelle (P)
Academic Advisor
B.A., Loras College

Richardson, Becky (P) x204
Instructor, Nursing
B.A., St. Francis University

Ridout, Tom (C) x211
Director, Accounting Services
A.A.S., Northeast Iowa Community College

Roberts, David (P) x270
Instructor, Humanities
A.A., Kellogg Community College
B.A., Western Michigan University
M. A., Western Michigan University
A.B.D., University of Iowa
Ph., D., California Coast University

Roberts, Diane (P) x204
Instructor, Nursing
B.S.N., University of Iowa
M.A., University of Iowa

Robertson, Michele (P) x204
Instructor, Respiratory Care
A.A.S., Kirkwood Community College

Roeder-Glenn, Jill (C) x273
Instructor, Psychology
B.A., Luther College
M.A., Loras College

Rohr, Debra (P) x261
Instructor, Nursing
B.S.N., Clarke College

Roling, Andrew (P) x270
Instructor, Humanities
B.A., St. Ambrose University
M.A., Eastern Illinois University

Ross, Christine (P) x270
Instructor, Communications
B.A., Clarke College

Rosulek, Andrew (C) x265
Coordinator, Computer Network
B.A., Milton College
M.Div., United Theological Seminary

Rotach, Julie (C) x273
Instructor, Sociology & Psychology
B.A., University of Northern Iowa
M.S., Winona State College

Rowan, Marcie (TCC) x139
Continuing Education Program Manager
A.A., Northeast Iowa Community College

Rummel, Penny (C)
Instructor, Consortium, Nursing
A.D.N., Northeast Iowa Community College

Running, Pat (C) x256
Instructor, Learning Center
B.A., University of Illinois

Rusk, Jane (P) x 317
Instructor, Accounting
B.B.A., University of Iowa
M.A., University of Iowa

Sands, Diana (P) x346
Instructor, Respiratory Care
Diploma, Northeast Iowa Community College

Scharnau, Ralph (P) x270
Instructor, Humanities
B.A., Beloit College
M.A., University of Illinois
Ph.D., Northern Illinois University

Scheffel, Linnae (C) x406
Dairy Center 866.474.4692
Instructor, Science
B.A., University of Northern Iowa
M.S., University of Iowa

Schenke, Amy (P) x346
Instructor, Respiratory Care
A.A.S., Northeast Iowa Community College

Schenck, Peter (P) x324
Instructor, Communications and Literature
B.A., Yale University
B.A., University of California, Santa Barbara
M.A., University of California, Santa Barbara
Ph.D., University of California, Santa Barbara

Schlee, Karla (C) x261
Instructor, Clinical Nursing
B.S.N., Allen Memorial School of Nursing

Schneider, Susan (P) x273
Instructor, Nursing
CCRN Certification
A.D.N., Northeast Iowa Community College
B.A., Clarke College
B.S.N., Clarke College
M.S.N., Clarke College

Schrader, Kathy (C) x261
Instructor, Clinical Nursing
B.A., Luther College

Schulze, Robert (C) x292
Instructor, Carpentry
B.A., University of Wisconsin

Seedorff, Suzanne (P) x300
Instructor, Marketing Management
B.A., University of Northern Iowa

Seibert, Rhonda (C) x337
Dean, Health & Human Sciences
Diploma, Northeast Iowa Community College
A.A.S., Northeast Iowa Community College
B.S., Upper Iowa University
M.S., Capella University

Seiffert, Deborah (P) x269
Coordinator of Learning Resources
B.S., University of Nebraska, Lincoln
M.Ed., Kent State University

Shahrivar, Mohammad (P) x276-103
Instructor, Computer Science
B.A., Upper Iowa University

Sheridan, R. Pat (C) x398
Instructor, Business and Computers
B.A., University of Northern Iowa
M.A., Iowa State University

Simon, Janette (C) x273
Instructor, Social Science
B.A., Upper Iowa University
M.A., University of Northern Iowa

Smith, Laurie (C) x273
Instructor, Life Skills
B.A., Waldorf College

Smrdel, Dianne (P) x276-252
Continuing Education Program Manager
A.A., Southeastern Community College
B.A., University of Iowa

Smutzler, Kelli (C) x214
Instructor, Business
Assistant Employment & Career Services Manager/Admissions Rep
B.S., Upper Iowa University
M.B.A., Upper Iowa University

Speltz, Debbie (C) x268
Instructor, Clinical Nursing
A.D.N., Northeast Iowa Community College
B.S.N., University of Iowa

Stecklein, Dennis (P) x270
Instructor, Math
B.A., Loras College

Steen, Mary (C) x341
Continuing Education Program Manager
B.A., University of Northern Iowa

Steinberg, Bonnie (C) x261
Instructor, Clinical Nursing
A.D.N., Iowa Central Community College

Steinberg, Linda (P) x270
Instructor, Humanities
A.A., North Iowa Area Community College
B.A., Buena Vista University
M.A., University of Kansas

Stiefel, Edna (C) x398
Instructor, Business/Computers
A.A.S., Hawkeye Community College
B.A., University of Northern Iowa
M.B.A., University of Northern Iowa

Stock, Karen (C) x273
Instructor, Communications
B.A., Luther College
M.A., Iowa State University

Stolze, Dena (TCC)
Continuing Education Program Manager
A.A., Kirwood Community College
B.S., University of Iowa

Stork, Sue (DC) x376-104
Coordinator, Dubuque & Adult Transition
B.A., Montana State University
M.A., University of Iowa

Streif, Tina (P)
Academic Advisor, TRiO Upward Bound
B.A., Wartburg College

Strief, Kristi (P) x319
Admissions Manager
A.A., Northeast Iowa Community College
B.A., Loras College

Sullivan, Margaret (C) 563.547.3355
Instructor, Humanities, Cresco Center
B.A., Michigan State University
M.A., Viterbo University

Sullivan, Terry (TCC)
Director, Small Business Development Center
B.A., Clarke College

Surom, Brenda (C) x261
Instructor, First Aid/CPR, EMT-P, EMS-I, Paramedic Cert., Mercy Health Care

C - Calmar Campus
800.728.2256

P - Peosta Campus
800.728.7367

Sweeney, Shawna (C) x345
Instructor, Health Information Technology
A.A.S., Northeast Iowa Community College
B.S., College of St. Scholastica

Swift, Connie (P) x280
Coordinator, Developmental Education
B.S., University of Wisconsin-Oshkosh
M.A.E., University of Northern Iowa

Syverson, Jacalyn (C)
Instructor, Cosmetology
A.A.S., Northeast Iowa Community College

Tagtow, Rick (C) x244
Instructor, Arboriculture
B.S., Iowa State University
M.A., University of Northern Iowa

Tekippe, Debra (C) x261
Instructor, Nursing, Continuing Education
A.D.N., Northeast Iowa Community College
B.S.N., Allen College

Theisen, Jan (P) x306
Instructor, Nursing
Certified Neuroscience R.N.
A.A.S., Corning Community College
B.S.N., University of Texas

Tigner, Robert (C) x
Instructor, Agriculture
B.S., Iowa State University
M.S., University of Wisconsin

Timp, Brenda (C) x261
Instructor, Nursing
A.D.N., North Iowa Area Community College
B.S.N., Viterbo College

Tobiason, Kyle (P) x 208
Instructor, Economics
B.A., Iowa State University
M.A., University of Arkansas

Townswick, Samuel (C) x336
Instructor, Human Services
B.A., Luther College
M.A., St. Mary's College

Tremmel, Tony (C) x411
Instructor, Learning Center / Writing Center
B.A., Benedictine College
M.A., University of Iowa

Trenkle, Timothy (P) x270
Instructor, Social Science
B.A., North Central College
M.S., University of Wisconsin-Whitewater

Triervieler, Lynn (P) x270
Instructor, Communications
B.S., University of Dubuque

Troy, Susan (P) x266
Instructor, Psychology
B.S., University of Minnesota
M.A., Loras College

Tschiggfrie, David (P) x270
Instructor, Math
B.A., University of Dubuque
M.A., University of Northern Iowa

Uhlenhake, Nancy (C) x268
Instructor, Clinical Nursing
B.S., Mount Mercy College

Vande Berg, Ken (D) x221
Vice President, Economic Development Services
B.A., Central College
M.A., University of Northern Iowa

Vande Lune, Troy (C) x237
Assistant Director, Student Life, Diversity & Leadership
B.A., Ozark Christian College

Vaughan, Jill (P) x204
Instructor, Nursing
A.D.N., Scott Community College

Verthein, Mary (C)
Instructor, Consortium, Clinical Nursing
A.D.N., Northeast Iowa Community College

Waechter, Bob (P)
Instructor, Gas Utilities

Warrington, Robyn (C) x 420
Instructor, Computer Technology
A.A.S., Northeast Iowa Community College

Webb, John (P) x242
Instructor, Electronics Technology
A.S., Western Wisconsin Technical Institute
B.S., University of Wisconsin, Stout

Weber, Kathy (P)
Coordinator, Career Outreach
B.A., St. Norbert College
M.A., Ball State University

Weber, Marianne (P) x322
Instructor, Business
B.A., Clarke College

Weber, Stefani (P) x270
Instructor, Psychology
B.A., University of Northern Iowa
M.A., Loras College

Weber, Tracy (P) 204
Instructor, Clinical Nursing
B.S.N., Regis University

Wee, Liang Chee (C) x469
Calmar Campus Provost
B.S., B.A., University of Arizona
M.B.A., University of Arizona
Ph. D., University of Arizona

Weitz, Krista (P) x276-247
Continuing Education Program Manager
B.A., Loras College

Welsh, Sandra (P) x308
Instructor, Nursing
Diploma, St. Luke's School of Nursing
A.D.N., Northeast Iowa Community College
B.S.N., Clarke College

Wenthold, Jessica (C) x205
Program Manager, Continuing Education
B.A., University of Northern Iowa

Wheelock, Wendy (P) x276-130
Executive Director, TCC & DC
B.S., University of St. Francis
M.B.A., University of St. Francis

Whitsitt, Katherine (C) x440
Director, TRiO Upward Bound
B.A., University of Wisconsin-Madison
Ed. Specialist, University of Wisconsin-Madison

Wilder, Clarian (C) x207
Curriculum Coordinator
B.S., Winona State University
M.S., Winona State University

Willenbring, Bede (P) x204
Instructor, Nursing
B.S.N., University of Dubuque

Willer, Jerry (P) x263
Instructor, Science
B.A., Wartburg College
M.S., University of Iowa

Willging, Greg (P) x276-128
Director, Economic Development Services
B.S., Loras College

Williams, Carolyn (P) x346
Instructor, Radiologic Technology
A.A.S., Northeast Iowa Community College

Williams, Theresa (P) x545
Instructor, Radiologic Technology
A.A.S., Blackhawk Community College

Wills, Penelope (Penny) (C) x201
President
B.S., University of Cincinnati
M.S., Miami University
Ph.D., Michigan State University

Wilmes, Mark (C) x409
Instructor, Electrical
Journeyman Electrician
Diploma, Jackson Area Vocational-Technical Institute
B.S., Iowa State University

Wilson, Jeri (C) x261
Instructor, Clinical Nursing
B.S.N., Upper Iowa University

Winter, Karla (C) x233
Registrar
A.A.S., Northeast Iowa Community College
B.A., Mount Mercy College

Winters, Mary (C) x222
Continuing Education Program Manager
A.D.N., State University of New York
B.S.N., University of Iowa

Wojdyla, Richard (P) x270
Instructor, Psychology
M.A., Loras College

Woodson, Chris (C) x263
Assoc Dean of Student Services/Counselor
B.A., Luther College
M.A., St. Mary's University

Wright, Jill (C)
Instructor, Clinical Nursing
B.S.N., Allen College of Nursing

Wurtzel, Julie (C) x218
Director, Continuing Education
B.A., Luther College

Wyninger, Edna (C)
Instructor, Massage Therapy
Certificate, Sister Roselind Gefre's School of Massage

Wysocki, Enid (P) x270
Instructor, Communications
B.A., Briar Cliff College
M.A., University of Northern Iowa

Yergler, Dennis (P) x270
Instructor, Humanities
B.S., Iowa State Universeity
M.A., Iowa State University
Ph.D., University of Iowa

Young, Emmett (P) x208
Instructor, Computer Science
A.A.S., Northeast Iowa Community College

Young, Julia (P)
Director, EL/Family Literacy
B.A., Ottawa University

Zweibohmer, Monica (C)
Instructor, Electronics
A.A.S., Northeast Iowa Community College
B.L.S., Viterbo College

C - Calmar Campus
800.728.2256

P - Peosta Campus
800.728.7367

Campus **Environment**

student driven...community focused

2008-2009

General Overview

Students at Northeast Iowa Community College may choose courses, degrees, diplomas, or certificates designed to assist them in achieving their educational objectives. These objectives may include a review of basic skills, exploration of courses to assist in career decisions, transfer to another college/university, entry into successful employment, improvement of skills for present job, and personal interest or self-improvement. A wide variety of options are described in this catalog. Courses are offered at the Calmar Campus, Peosta Campus, Chickasaw County Center, Cresco Center, Delaware County Center, Dubuque Center, Oelwein Center, Waukon Center, and off-campus sites. Information about specific course schedules is available from the Student Services Office.

Potential Catalog Changes

Northeast Iowa Community College reserves the right to change policies or revise the information contained in this catalog. Should the institution feel obligated for reasons including, but not limited to, low enrollment or financial constraints, the college reserves the right to terminate any courses or programs from its offerings. Information regarding revisions and updates may be obtained from the Student Services Office.

Faculty-to-Student Ratio

The NICC faculty is committed to high-quality instruction and personal attention to students. The average student-instructor ratio ranges from 14:1 to 18:1. The faculty is comprised of individuals who are well prepared through formal educational preparation and previous occupational experience. Faculty members keep abreast of educational and technological changes through conferences, seminars, and coursework as well as on-site visits to other institutions of higher education.

Outcomes Assessment

Northeast Iowa Community College has made a major commitment to institutional effectiveness with the primary goal being to assess the academic success of students and the institutional environment and to use that information to increase students' learning, academic achievement, and personal development in light of the changing educational and human needs of the community served. To this end, students will be expected to participate in outcome assessment activities as needed.

Campus Environment

Drug-Free Policy

The possession, use, or distribution of illicit drugs and alcohol by students (regardless of the length of the student's program of study) or employees on the property of Northeast Iowa Community College or as part of any of its activities will subject the student or employee to immediate disciplinary action, up to and including expulsion or termination of employment and referral for prosecution. Disciplinary sanction may include the completion of an appropriate rehabilitation program. The college complies with all of the requirements of the Drug Free Workplace Act of 1989, P.L. 101-226.

Student Responsibility for Catalog Information

College catalogs are available in the Student Services Office or online at www.nicc.edu. Each student is responsible for being familiar with the information appearing in the college catalog and student planner. Failure to read the policies and procedures will not be considered an excuse for non-compliance. The college reserves the right to change policies or revise curricula as necessary due to unanticipated circumstances.

Smoke-Free Policy

In order to provide a safer and healthier environment for students, employees, and visitors, the smoking of tobacco and tobacco products is prohibited within college buildings and vehicles. Smoking areas are designated on the grounds. Any student of the college who violates this policy will be subject to disciplinary action.

Life Threatening Disease Policy

Northeast Iowa Community College is committed to protecting the health of all students and providing a safe work environment for its employees, students, and visitors. It is recognized by the college that most persons with a dangerous and life-threatening disease, including bloodborne infectious diseases, should be allowed to continue with their education with the approval of their personal physician. In some cases, NICC will designate an independent physician to evaluate the disease on an ongoing basis to determine the suitability of continued enrollment.

If it is determined by the independent physician that the student cannot perform the essential education obligations without endangering the health and safety of the student or others, then the student shall be suspended until the risk posed by the disease has terminated. A plan for periodic review and evaluation by the independent physician will be established at the time the initial decision is made to suspend the student from further enrollment at NICC.

It is not the policy of NICC to require random sampling and screening of students for an illness. The conditions of this paragraph, however, do not apply if the State Epidemiologist or any state or federal public health official determines that an infected person poses a significant risk of transmission to other persons. It is the policy of the college to respect the privacy of all persons with a disease.

Bloodborne and Infectious Diseases

Any person enrolled in any health care program with a clinical component may be exposed to environmental hazards and infectious diseases, including, but not limited to: tuberculosis, hepatitis B, hepatitis C, and HIV (AIDS). All healthcare students are obliged to provide patient care under the parameters of HIPAA. Persons interested in receiving specific information regarding HIPAA policies and/or policies and procedures regarding bloodborne and/or infectious diseases should contact the Dean of Nursing and Allied Health.

Unlawful Discrimination, Harassment, or Retaliation Policy

This internal complaint procedure provides for the prompt and equitable resolution of unlawful discrimination. harassment, sexual harassment, and/or retaliation complaints. This procedure is established in order to review, investigate and resolve allegations of unlawful discrimination or harassment based upon race, creed color, national origin, ancestry, age, sex, marital status, familial status, affectional or sexual orientation, liability for service in the Armed Forces of the United States, disability, or protected activity (i.e. opposition to prohibited unlawful discrimination or participation in the compliant process). Sexual harassment is a form of unlawful gender discrimination and, likewise, will not be tolerated. This procedure is meant for use by employees, students, visitors, and contractors associated with Northeast Iowa Community College in the resolution of a complaint against an employee or student of the College.

Information on your rights and responsibilities under these procedures may be obtained through the Office of Human Resources, Darwin L. Schrage Administration Building, Calmar Campus, 563-562-3263, ext. 300 (or 800-728-2256, x300).

A. Discrimination Complaint Process

1. Application

If informal resolution of a complaint is not possible and the employee, student, visitor, or contractor making the complaint wishes to pursue a formal complaint of alleged unlawful discrimination harassment, or retaliation, the complainant shall complete the *NICC Discrimination/Harassment/Retaliation Complaint Form* which is available from the Office of Human Resources.

This procedure applies to all formal complaints of unlawful discrimination, harassment, or retaliation filed against employees or students of NICC. Any person who alleges unlawful discrimination, harassment, or retaliation by an employee shall use this procedure. The Director of Human Resources shall oversee the investigation of all unlawful discrimination, harassment, and retaliation complaints.

2. Reporting Violations
(a) All persons have the right and are encouraged to report suspected violations of NICC policies on unlawful discrimination, harassment, and/or retaliation immediately by contacting Julie G. Huiskamp, Director of Human Resources, Darwin L. Schrage Administration Building, Calmar Campus, 563-562-3263, ext. 300 (or 800-728-2256, x300).

(b) Additionally, complaints may be reported to John D. Noel, Vice President for Finance and Administration, Darwin L. Schrage Administration Building, Calmar Campus, 563-562-3263, ext. 202 (or 800-728-2256, x202), to Curt Oldfield, Vice President for Academic Affairs, Peosta Campus, 563-556-5110, x135 (or 800-728-7367, x135), or to Dr. Linda M. Peterson, Dean of Student Services, Peosta Campus, 563-556-5110, x267 (or 800-728-7367, x267)

B. Unlawful Discrimination, Harassment, or Retaliation Complaint Procedure
The following procedures apply to all complaints of unlawful discrimination, harassment, and retaliation from employees, students, visitors, and contractors associated with Northeast Iowa Community College against an NICC employee or student.

1. Referral of Complaint

(a) Complaints
All complaints and/or incidents of unlawful discrimination, including sexual harassment, or retaliation shall be referred to the Director of Human Resources for investigation and resolution. If complaints or incidents arise which appear to involve faculty misconduct and/or competence, the Director of Human Resources and the Vice President for Academic Affairs shall collaborate to oversee a joint investigation. If complaints or incidents arise which involve students, the Director of Human Resources, the Vice President for Academic Affairs, and the Dean of Student Services shall collaborate to oversee a joint investigation.

(b) Disqualification
If reporting a complaint to the Director of Human Resources presents a conflict of interest, the Director of Human Resources shall not participate or otherwise be involved with the investigation of the complaint, except as a witness in order to defend a claim made against him or her by the complainant. An example of such a conflict would be when the individual against whom the complaint is made is involved in the intake, investigation, or decision-making process. The same shall be true of complaints that involve the Vice President for Academic Affairs, the Dean of Student Services, and/or the Vice President for Finance and Administration.

2. Filing of Complaints

(a) Complaints should be reported within 30 days of the alleged occurrence of unlawful discrimination, harassment, and/or retaliation.

(b) Supervisory employees shall immediately report all alleged violations of NICC policies on unlawful discrimination, harassment, and/or retaliation, whether reported by any other person or observed directly, to the Director of Human Resources.

3. Investigation of Complaints

(a) The Director of Human Resources will conduct an impartial investigation into the alleged unlawful discrimination, harassment, or retaliation. At his/her discretion, the Director of Human Resources may involve other staff members, legal counsel, or outside experts to assist in the investigation.

(b) At each opportunity during the investigation, the Director of Human Resources will encourage conciliation or an informal settlement that is satisfactory to the parties concerned.

(c) College employees are required to cooperate with the Director of Human Resources in the investigation of complaints and any recommendations or final directives issued as a result.

4. Completion of Investigation
Upon completion of the investigation, the Director of Human Resources will prepare a written report which may include a summary of the complaint, summary of the facts, analysis of the allegations and facts and a finding. The investigatory report will be submitted to the Vice President for Finance and Administration unless the Vice President has been actively involved in the investigation. In this case, the report will be submitted to the President.

5. Final Decisions
The Vice President will review the investigatory report and make a determination as to whether the allegations of a violation of NICC policies prohibiting unlawful discrimination, harassment, sexual harassment, or retaliation have been substantiated. During review and consideration, the Vice President may, at his/her discretion, consult with other staff members, outside experts, and/or legal counsel. If a violation occurred, the Vice President will determine the appropriate corrective measures necessary to remedy the situation, including disciplinary action. The Vice President will issue a final letter of determination to all parties, containing the results of the investigation.

6. Confidentiality
Confidentiality, to the extent practical, appropriate, and legal under the circumstances, will be maintained throughout all phases of the intake, investigation, and remediation process. In the course of the investigation, it may be necessary to discuss the claim with other persons who may have relevant knowledge. It may be necessary, therefore, to disclose information to parties with a legitimate need to know. All persons interviewed will be directed to maintain the confidentiality of the investigation. Any breach of confidentiality by anyone involved in this procedure may be considered an act of obstruction, and may subject that person to disciplinary action.

7. Retaliation Prohibited
Any person who participates in the procedure, either as a party, witness, or otherwise, may do so without fear of retaliation. Retaliation by any College employee shall be grounds for disciplinary action, up to and including termination.

8. False Accusations and Information
If any employee knowingly makes a false accusation of unlawful discrimination, harassment, sexual harassment, or retaliation or knowingly provides false information in the course of an investigation of a complaint, such conduct may be grounds for disciplinary action up to and including termination. Complaints made in good faith, however, even if found to be unsubstantiated, will not be considered a false accusation.

9. Record of Complaint and Decision
The record of complaint, informal resolution, or final decision shall be retained in a file in the Office of Human Resources.

10. Appeal Process
If the complainant or accused disagrees with the determination of the Vice President, he/she may submit a written appeal within twenty (20) days to the President. After reviewing the documentation, the President may elect to reverse or modify the decision.

11. External Complaint Process
In addition to utilizing this internal procedure, a complainant can file directly with federal and state agencies that investigate unlawful discrimination/harassment charges. The time frames for filing complaints with external agencies indicated below are provided for informational purposes only. Employees, students, visitors, and/or contractors should contact the specific agency to obtain exact time frames and procedures for filing a complaint.

Iowa Civil Rights Commission

Filing deadline: 180 days from violation

Iowa Civil Rights Commission
Grimes State Office Building
400 E. 14th Street
Des Moines, IA 50319-1004
515-281-4121, 1-800-457-4416
Fax 515-242-5840
www.state.ia.us/government/crc/

United State Equal Employment Opportunity Commission (EEOC)

Filing deadline: 180 days from violation. This deadline is extended to 300 days from violation if the violation is also covered by unlawful discrimination laws in the State in which the violation is alleged to have occurred.

Chicago District Office
500 West Madison Street,
Suite 2800
Chicago, Illinois 60661
800-669-4000
312-886-1168—Fax
800-669-6820—TTY
www.eeoc.gov

Milwaukee District Office
Reuss Federal Plaza
310 West Wisconsin Avenue, Suite 800
Milwaukee, WI 53203-2292
800-669-4000
414-297-4133—Fax
800-669-6820—TTY
www.eeoc.gov

Office of Civil Rights, U.S. Department of Education

Filing deadline: 180 days from violation

Office for Civil Rights
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, D.C. 20202-1100
(202) 245-6800; 1-800-421-3481
Facsimile: (202) 245-6840
TDD: (877) 521-2172
Email: OCR@ed.gov
Web: http://www.ed.gov/ocr

Office for Civil Rights/Chicago
U.S. Department of Education
Citigroup Center
500 W. Madison Street
Suite 1475
Chicago, IL 60661
Tel.: (312) 730-1560
Fax: (312) 730-1576
TDD: 312-730-1609
or 1-877-521-2172

Sex Offender Notification Policy

Northeast Iowa Community College will maintain procedures that facilitate the prompt notification of appropriate personnel of the presence of an employee or student who is a convicted sex offender.

Iowa Code Section 692A.3A states that a person required by law to register under the Sex Offender Registry Law who is employed on a full-time or part-time basis or who is registered as full-time or part-time student in an institution of higher education must notify the sheriff in the county in which the institution is located. This notification must be made within five business days of becoming an employee or enrolling as a student at the institution. The NICC community is advised that, in compliance with the Clery Act [20 USC 1092 (f)], the Iowa Sex Offender Registry is available at http://www.iowasexoffender.com

Campus Emergencies

If an emergency, such as a fire or tornado should arise or threaten, an alarm will sound or an appropriate announcement will be made as soon as possible. Emergency exit routes from buildings are posted and appropriately identified. Fire and tornado drills are held on a regular basis. For emergencies such as tornadoes that require occupants to remain within the buildings, directions are posted in each room near the exit designating shelter areas. Students should acquaint themselves with the two different forms of emergency alarms and routes as soon as possible.

Medical Emergencies

If an emergency occurs, please call (911) for the local Emergency Services . An emergency situation can best be described as existing when a person appears to have one or a combination of the following symptoms: weakness, dizziness, paleness, chest pains, shortness of breath, nausea, high pulse rate, heart palpitations, and/or fainting. Any of the above symptoms would require immediate medical attention and the following steps should be taken by a staff or faculty member:

- Make the individual comfortable and attempt to keep him/her calm. If certified in CPR, and the individuals condition warrants it, begin CPR measures.
- Contact Emergency Medical Services (911) immediately. Identify the building and location to the dispatcher.
- Inform the individual that NICC will contact a family member on the individual's behalf. If upon arrival it is the opinion of the Medical Services responders that the individual warrants further medical attention, he/she will be transported to the closest hospital or to a hospital of the individual's choice that is served by Emergency Services.
- The staff person or faculty member will initiate an Incident Report Form and submit immediately to the campus provost or designee.

Simple Injuries

This type of injury can be described as one that occurs from an accident while the individual is on campus. First-aid kits are available at the switchboard and at various areas throughout the campus buildings. All injuries must be reported to the Campus Provost or a campus dean or designee, with an Accident Report Form filed within 24 hours.

Dismissal of Classes

If icy or snow-filled roads would make driving hazardous, students are asked to tune into the following radio or television stations for official cancellation of NICC classes:

Cedar Rapids	KCRG	CH. 9/ABC
Cedar Rapids	KGAN	CH 2/CBS
Cedar Rapids	WMT	96.5 FM
Cresco	KCZQ	102.3 FM
Decorah	KDEC	100.5 FM
Decorah	KVIK	104.7 FM
Dubuque	KAT	92.9 FM
Dubuque	KDTH	1370 AM
Dubuque	KFXB	CH 40/FOX
Dubuque	KLYV	105.3 FM
Dubuque	WJOD	103.3 FM
Dubuque	KXGE	102.3 FM
Dubuque	KGRR	97.3 FM
Dyersville	KDST	99.3 FM
Elkader	KCTN	100.1.FM
La Crosse, WI	WIZM	93.3 FM
Manchester	KMCH	94.7 FM
Maquoketa	KMAQ	95.1 FM
New Hampton	KCZE	95.1 FM
Oelwein	KOEL	950 AM
Oelwein	KOEL	92.3 FM
Rochester	KROC	106.9 FM
Rochester	KTTC	CH 10
Spring Grove	KQYB	98.3 FM
Waterloo	KFMW	107.9 FM
Waterloo	KWLO	1330 AM
Waterloo	KWWL	CH 7/NBC
Waukon	KNEI	103.5 FM

Campus Security

Clery Act Annual Security Report

In 1991, the U.S. Congress passed the Student Right-to-Know and the Campus Security Act, which requires colleges to report the three previous years of statistics on murder, sex offenses, robbery, aggravated assault, burglary and motor vehicle theft, and statistics on arrests for drug and alcohol violations and weapons violations. In 1998, Congress passed an amendment renaming the act the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act and required that all crimes motivated by hate or bias be included in the statistics. NICC recognizes the importance of maintaining a safe and secure learning environment. Information concerning sex offenses in the NICC district may be accessed at www.iowasexoffenders.com. NICC campus crime statistics are published in the Campus Security Report, and can be accessed at www.nicc.edu.

Reporting Crimes

Students and staff are encouraged to report all criminal and/or suspicious activity to the Campus Provost or Dean or Associate Dean of Student Services. In the event of an emergency, call 9-911 to expedite the appropriate response by authorities. All reports will be investigated.

Hostile Person/Intruder on Campus Policy

Security Procedures

The purpose of this procedure is to provide guidelines for staff response when they encounter a security problem such as hostile/threatening behavior and/or intruder situations encountered on campus or in the classroom. It is designed to:

1. Provide staff with a procedure to use if they encounter hostile/threatening behavior or intruders in the work place, or witness behavior on the part of others which is considered to be threatening and/or unacceptable conduct.

2. Help staff proactively plan how they will summon assistance from other staff, or respond to an emergency request from fellow staff for assistance in an emergency situation, when a physical threat is imminent.

3. Provide guidelines to obtain assistance from internal campus staff or law enforcement officials.

4. An intrusion by an unauthorized individual whose conduct may be aggressive and/or passively resistant.

A security problem may be defined as:

1. An angry person whose conduct, in the judgment of staff, may turn hostile and or physically threatening.

2. Someone who is actually armed or talks about being armed.

3. A fight is in progress.

The illustrations above are but a few examples of the type of hostile/threatening conduct you may encounter, when you should call for assistance from other staff. These examples are by no means all encompassing. The safest approach is to extract yourself from the direct threat environment, if possible, and immediately call for assistance. You have the authority and responsibility to call for help and clearly state the nature of the incident. Students should contact the nearest staff/faculty member.

All staff need to be aware of the fact that once local law enforcement arrive at the scene (campus) they are in charge and all staff will follow their directions until released and relieved of their duties by law enforcement officials and the incident commander.

Admissions

Application Process
Dual Admissions Agreements
International Student Admissions
Iowa Residence
Standards for Health Care Career Programs
Fraudulent Academic Credentials

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Admissions

NICC admits any person who can benefit from a program of study. Admission to the college, however, does not mean admission to all courses or academic programs. Students may be required to take preparatory work prior to entering specific college classes.

In addition to the college admission procedure, some academic programs have specific requirements. The program requirements considered for eligibility include educational experiences to ensure the student possessess the potential to complete the program successfully. A person who does not meet the requirements for a specific academic program may become eligible after completing appropriate work in developmental studies or prerequisite credit classes.

NICC reserves the right to evaluate requests for admission and to refuse admission to applicants when considered to be in the best interest of the college. NICC may require a person to provide a medical statement from a physician for admission to a specific major or when it is otherwise in the best interest of the student and/or the college.

Campus tours are readily available by calling the Admissions Office at either campus.

Application Process

1. Submit a completed Application for Admission to the campus you plan to attend or apply online by visiting NICC's Website at www.nicc.edu. There is no application fee.

2. Complete a pre-admission placement test (ACCUPLACER) offered through the campus Assessment Centers and throughout the district at the NICC Centers. ACCUPLACER is computer-adaptive, administered over the internet, and evaluates reading comprehension, essay writing, and mathematics. Please refer to the Assessment Services section for ACCUPLACER preparatory information. The ACCUPLACER test may be waived by submission of one of the following to the campus Admissions Office:

- ACT or other comparable placement test scores. Scores are valid for five years.
- Applicable college coursework. Assessment requirements may be waived based on previous courses taken, credits earned and grades received. Send official college transcripts to the Admissions Office of the campus you plan to attend for determination of partial or full assessment waiver.

3. Submit a high school transcript. The high school transcript/GED is not required for acceptance to NICC but is required for the Dental Assisting and Cosmetology programs. Submission of your high school transcript is strongly encouraged to provide successful academic advising.

Dual Admission Agreements

University of Dubuque: The University of Dubuque in partnership with NICC offers a unique dual admission opportunity. The agreement provides the opportunity for students to obtain an Associate Degree at NICC and also be enrolled at UD with access to their library, sports complex, college events, etc. The UD Transfer Admission Counselor will be on the NICC campus working with dual enrolled students to get them in the correct courses for their major. The student will complete two courses, World View Seminar I and II with UD while enrolled at NICC and will pay NICC's tuition rate for those courses. For more information on this agreement, please contact the Admissions Office at NICC (563-556-5110) or at UD (563-589-3000).

Clarke College: Students who participate in the joint admissions program will become better acquainted with the Clarke College community while earning college credit at NICC and preparing for their transition to Clarke College. Students applying to NICC complete the NICC admissions process. Students admitted to the college are eligible to apply for the joint admissions program. Interested students will meet with the Clarke College transfer coordinator

and complete the Clarke College application for admission in their first semester at NICC. Students will be admitted to the joint admission program based on the following criteria:

- Full-time enrollment at NICC
- Completed Clarke application for admission
- Midterm academic good standing at NICC

Once accepted into the joint admissions program, students will enroll in a Cornerstone class taught at Clarke College. This two-semester, six credit course encompasses freshman seminar, written composition, public speaking, and critical thought. It will be billed at NICC rates and will be included as credit toward the full-time enrollment for financial aid purposes. Students participating in the program will receive an identification card to provide access to the Nicholas J. Schrupp Library as well as entry to athletic events and fine arts events at Clarke College. Participating students will be considered "current" for registration purposes when the transition to Clarke occurs and, providing that there is no hold on transcripts at NICC, students will be able to take part in the current student registration period at Clarke College.

For more information on this agreement, please contact the admissions office at NICC (563-556-5110), or Clarke College (563-588-6316).

International Student Admissions

If you are a non-U.S. citizen, not a permanent resident of the U.S., and you are interested in attending NICC, please follow the outlined procedure below. You must supply the information below to the Admissions Office before an I-20 Eligibility form may be issued. Your admission will not be granted and an I-20 will not be issued until all of the requested information has been received. All forms are available from the NICC Admissions Office or are downloadable from the NICC Website at www.nicc.edu.

- Completed NICC Application for Admission form.
- A current photo of yourself.
- The original or certified copy of transcripts from your previous high school and colleges sent directly from those institutions. All such transcripts must be translated and notarized if in other than the English language.
- A notarized statement from your banker on official bank stationery showing evidence of the ability to meet the educational and living expenses (listed below).
- Evidence of your English proficiency. A TOEFL score of 500 (or 173 on the computerized version) or official transcript showing completion of freshman-level English at an accredited U.S. college or university.

International Student Expenses

Students on F-1 (student) visas are classified as non-resident, but tuition and fees will be the same as for Iowa residents. Current (approximate) expenses per academic year are:

Tuition and Fees (based on 32 credit hours)	$4,096
Textbooks	$1,000
Housing	$4,500
Food	$2,000
Miscellaneous	$1,200
Total	$12,796

All of the above information is subject to change.

If you have any questions concerning the Application for Admission, please contact the Admissions Office at either campus.

Iowa Residency

Students enrolling at NICC are classified by the Student Services Office as residents or non-residents for admission and reporting purposes. It is the responsibility of the student to request reclassification of his/her residency status by the Student Services Office. This must be done prior to registering for the term for which Iowa residency is sought.

Standards for Health Care Career Programs

Iowa community colleges have developed core performance standards for all applicants to health care career programs. These standards are based upon required abilities that are compatible with effective performance in health care careers. Applicants unable to meet the core performance standards are responsible for discussing the possibility of reasonable accommodations with the designated institutional office. Before final admission into a health career program, applicants are responsible for providing medical and other documentation related to any disability and the appropriate accommodations needed to meet the core performance standards. These materials must be submitted in accordance with the institution's ADA Policy. Information on the core performance standards can be obtained from the dean of the health programs.

Fraudulent Academic Credentials

Any person seeking to become a student at NICC who submits a fraudulent or altered academic credential to the college or who is found to have fraudulently altered NICC academic credentials or records will be subject to penalties including suspension or expulsion from the college and/or legal prosecution

Tuition & **Fees**

Tuition Payment Plan
Tuition and Course Fee Refund

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Tuition and Fees

Tuition and fees are based on the 2007-08 academic year. At the time of printing, tuition and fee rates for the 2008-09 academic year had not yet been determined. These rates are subject to change at any time.

Iowa Resident Tuition

- $115.00 per credit hour.

Non-Iowa Resident Tuition

- $115.00 per credit hour.

Student Fees

- Course Fee – $13.00 per credit hour for 2008-2009.
- Other Program Costs – Expenses vary depending on specific program requirements (such as textbooks, tools, and uniforms).

Tuition Payment Plan

Students wishing to set up a monthly payment plan for tuition and course fees need to do so through Tuition Payment Plan (not available for textbook purchases). Nelnet is an online service that allows you to set up automatic monthly payments to be deducted from a checking, savings, or credit card account. See the Automatic Payment Plan brochure or contact the Business Services Office for plan options and deadlines.

Tuition and Course Fee Refund

Students who wish to cancel their registration or drop a course must notify the Student Services Office before the first day of the term or class to avoid tuition/fee assessment. Students who withdraw from NICC or drop a course may be eligible for a tuition and course fee refund. Tuition and course fee refunds are calculated based on the start date of the course. Calendar days, less holidays and weekends, are used for calculations regardless of the number of class meetings.

12 - 16 week courses:
1-5 days ..... 100% tuition and course fees
6-10 days ..... 50% tuition and course fees
11-15 days ..... 25% tuition and course fees

8 - 11 week courses:
1-3 days 100% tuition and course fees
4-7 days 50% tuition and course fees
8-10 days 25% tuition and course fees

4 - 7 week courses:
1-2 days ..... 100% tuition and course fees
3-4 days ..... 50% tuition and course fees
5-6 days ..... 25% tuition and course fees

3 weeks and less courses:
Prior to the start of the 2nd class meeting100% tuition and course fees

Academic **Policies** & **Information**

- Course Registration
- Standards of Academic Progress
- Attendance
- Course Change/Course Withdrawal
- Cancellation Policies
- Course Credit/Load
- Proficiency Examinations
- Credit for Military & Life Experience
- Distance Learning
- Placement and Course Pre-requisites
- Change of Academic Program
- Grading System
- Grading Policies
- Withdrawal from the College
- Student Concerns/Grievances
- Classroom Visits/Field Trips
- Transcripts
- Graduation Requirements
- Transfer of Credits
- Family Education Rights and Privacy Act (FERPA)

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Academic Policies and Information

Course Registration

Students will receive notification of registration dates each term. Upon notification, students must contact their academic advisor. Advisors review education plans, discuss future education goals, and review the registration process, which includes an online option. The final decision on course selection and registration is the student's responsibility.

Standards of Academic Progress

The Standards of Academic Progress assist in the early identification of students experiencing academic difficulty. NICC has numerous services to assist student learning and academic progress toward a degree or course description. A student who has attempted nine or more semester hours of academic credit is required to maintain a cumulative minimum grade point average of 2.00. A student whose cumulative grade point average is below 2.00 will be placed on academic probation. All students placed on academic probation will remain on academic probation until their cumulative GPA is raised to 2.00. A student on probationary status will return to "academic good standing" when the student's cumulative GPA is raised to 2.00 or higher.

Note: Individual programs may have more stringent academic progress standards. Students should work with their academic advisors to ensure compliance.

Students who are placed on academic probation are encouraged to meet with their academic advisors to discuss their academic progress. Students are also encouraged to access available college resources. To learn more about academic and college resources, students should contact their academic advisor or the college counselor.

This policy is independent of the Financial Aid Satisfactory Academic Progress policy, if a student receives financial aid; there are additional criteria to meet as noted in this handbook and in the college handbook.

Satisfactory Academic Progress

To earn a degree or diploma, students are required to maintain "satisfactory academic progress." This means the student must earn a cumulative grade point average of 2.00 or better and pass all courses within that program or major. Additionally, some programs require a minimum grade in some or all of the courses in that program. Refer to the "Minimum Grade Requirements for Health Occupations" section in this handbook for specific information.

Satisfactory academic progress must be maintained in order for eligible students to continue receiving financial aid. Refer to the "Financial Aid" section of the college handbook for additional information.

Students will be encouraged to meet with a counselor if they are not making satisfactory academic progress.

Grades

Grades will be available online at the end of each semester. Students can access grades at www.xpress.nicc.edu. Grades will be mailed to students upon written request, provided no financial obligations are due to the college. Grades will not be given out over the phone. Questions regarding specific grades should be directed to the instructor.

Minimum Grade Requirements for Health Occupations

Students enrolled in health occupations programs must pass all required coursework with a minimum of a C- grade. However, a minimum 2.0 cumulative GPA (C grade average) is required to graduate from the program and the college. Students should work with their academic advisor to ensure grade requirement compliance.

Attendance

There is a strong relationship between success in college and class attendance. Any absence interferes with the learning process and may contribute to academic failure. Because NICC is committed to helping students find success, the college is committed to the importance of regular attendance in all classes. NICC instructors are required by federal student financial aid regulations to maintain accurate attendance records and submit those records periodically to the NICC Financial Aid Office. Instructor notification of non-attendance could interfere with Veteran's Administration or other financial aid benefits.

Instructors individually determine their attendance policies. It is each student's responsibility to learn their instructors' attendance policies. Students are expected to confer with instructors immediately following absences. In cases of advance knowledge of an absence, students should confer with the instructor prior to the absence. In all other cases, students should call the campus switchboard to report absences

Course Change/Withdrawal

Course change

Students requesting a change in their course schedule should contact their academic advisor. Students who wish to register or change their schedule after the fifth day of the term must receive dean approval. No new registration or course additions will be allowed after the tenth day of the term with the exception of late start courses. Tuition, program length, and financial aid may be affected by a course change.

Course Section Change

A student requesting to transfer into a different section of the same course (e.g. transfer from an online section to a face-to-face section) after the 100 percent refund period for the course must obtain approval from both the receiving instructor and department dean. If the sections are the same length of time, there will be no additional charge. If a student wishes to transfer to a section that begins at a later date within the term, a grade of "W" (withdrew) will be assigned to the original section and the student will be charged for the new section. A refund may be received for the original section if the change is made during the refund time period.
(See the Tuition Refund policy.)

Course Withdrawal

Changes made after the 100 percent refund period for the course will be listed on the student's permanent record with the grade of "W" (withdrew). Students may officially withdraw from a course prior to completing three-fourths of the respective course by completing a course withdrawal form available through the Student Services Office. Students who do not complete the official withdrawal process may expect to receive a failing grade. Charges for withdrawal during summer, special sessions, or condensed sessions will be prorated accordingly. (See the Tuition Refund policy.)

Cancellation Policies

Cancellation of Non-Attending Students

Students will be cancelled from their courses at the end of the second week of the semester based on instructor verification of non-attendance. For courses that begin after the second week, students will be cancelled after the second class meeting. The Registrar's Office will notify students in writing of their change in enrollment status.

Cancellation of Non-Paid/Attending Students

Students will be cancelled from enrollment if they do not pay tuition and fees, enroll in an authorized payment plan, or finalize financial aid arrangements after the second week of the term. Students will be notified in writing of their change in enrollment status by the Registrar's Office. Students cannot attend a course unless they are officially registered. Students may be reinstated, but are not guaranteed enrollment into the course from which they were

cancelled. If financial arrangements and course reinstatement are not officially completed, students will not receive a final grade for any course(s), regardless of whether they have been attending. NICC refund policy will be in effect and tuition and fee charges may be assessed to your account even though you are cancelled.

Indebtedness Policy

Students may not register for any new term while they have prior unsettled indebtedness to NICC. During the period in which the indebtedness remains unsettled, no transcripts or other official credentials can be obtained from the college. Diplomas or degrees will not be granted nor will credits be transferred to another college until all accounts are settled.

Course Credit/Load

Unit of Credit

Each course carries semester hours of credit based on the total contact hours and the method of instruction. Semester hours are used to determine a student's grade point average (GPA).

Course Load

Enrollment status is based on the number of enrolled credit hours each semester. Full-time status for fall and spring semesters is a minimum of 12 credit hours and summer is a minimum of 9 credit hours. Unless prescribed otherwise by the student's program, course load for fall and spring may not exceed 19 credit hours, summer may not exceed 12 credit hours, and winterim or May term may not exceed 3 credit hours. Requests for exceeding the maximum course load should be made to the department dean or campus provost.

Proficiency Examinations

Examinations are available which allow students to test out of certain courses (first week) with permission from faculty responsible for teaching the courses. Grade requirements for examinations are determined by departments. Students who successfully test out of a course will receive a "T" (credit by examination) on their transcript.

College Level Examination Program (CLEP)

CLEP is a means of recognizing informal education experience through examination. This provides the opportunity to obtain college credit through the successful completion of these examinations.

There are two forms of CLEP examination. The general examination measures college-level achievement in general education areas usually covered in the first two years of college. The subject examination measures achievement in specific college courses and is used to grant credit for these specific courses. CLEP credit will not be awarded for courses already successfully completed at NICC or another post-secondary institution. For information on CLEP, contact the Student Services Office at either campus. For information on the nearest test center contact 1-800-257-9558 or www.collegeboard.com/clep.

Credit for Military and Life Experience

Credit may be granted to veterans for educational experiences completed in the Armed Forces of the United States or for college work completed through the United States Armed Forces Institute. Credit may also be accepted from other institutions participating in the Servicemen's Opportunity College (SOC). Credit may be awarded for successful completion of technical or specialized schools attended while on active duty to the extent that it is applicable to

program content. Students are required to provide an official military transcript to the college. The college considers the recommendations for credit in the Guide to the Evaluation of Educational Experiences in the Armed Services of the Office of Education Credit of the American Council on Education.

NICC provides for the earning of credit through life experience. Students who are able to demonstrate skills and competencies acquired prior to enrollment in a given course may be eligible for credit for their life experience. The life experience must demonstrate the student has mastered all competencies covered in the specific course, and all credits earned must be directly related to the identified NICC course for which the student is seeking credit. The evaluation of such an achievement will be determined by faculty and staff familiar with the discipline in which the student is seeking credit and must be verified by experiences that can be an observed demonstration of competence, written or oral examination, and/or documentation from a current or past employer. In many cases, all three criteria must be met.

Students interested in seeking credit for life experience should contact their advisor or the appropriate dean. General education courses and any course in which the student could have the option of completing a College Level Examination Program (CLEP) to obtain credit are not eligible for credit for life experience.

A maximum of 18 credits for life experience is allowed. Course credit for life experience is at the discretion of each individual department and is limited to the courses within that department. Cost per credit hour for credit for life experience is $10 per hour.

Credit for life experience, although counting towards a student's degree requirements at NICC, may not transfer to another institution. Students are recommended to contact the institution and inquire into the transferability of the life experience credits.

Distance Learning

NICC uses technology to bring education to you. Distance Learning classes use computers, the Internet, the Iowa Communications Network (ICN), interactive discussion boards, video streams, and web casts to offer quality college classes at a time and place that fit your schedule.

NICC offers three types of Distance Learning courses: (1) Online—or *Web-based*, (2) ICN—or *videoconference*, (3) Hybrid—or *blended*. For information about distance learning courses, refer to the NICC website at www.nicc.edu and click on the Distance Learning link.

Online Courses

NICC offers a broad range of online courses in all subject areas. Although web-based courses involve an Internet-based delivery method rather than a traditional face-to-face setting, the academic expectations are the same. Online course structures vary depending on the subject, but they are similar to structures of traditional on-campus courses. The difference is that the assignments and activities can be performed from a distance, on your computer, in your own home. Tuition, registration, financial aid eligibility, and credit transferability are the same for online courses as they are for traditional on-campus courses.

ICN Courses

The Iowa Communications Network (ICN) is a two-way, interactive fiber optic network used throughout Iowa for distance education. The network provides a two-way audio and video classroom—where students can see and hear the instructor, and the instructor can see and hear the students. ICN classrooms are very similar to traditional on-campus classrooms, but also feature remote control cameras, TV screen projection, and push-to-talk microphones. Taught from one origination site, the instructor delivers the course to several students in various ICN classrooms at the same time, much like a videoconference. This way, you can attend class in a classroom closer to your home or work and still interact with your classmates and instructor in real time.

Hybrid Courses

Hybrid courses combine face-to-face classroom instruction with computer-based learning. A significant part of the course content is online and, as a result, the time spent in the classroom is reduced. Most hybrid courses meet a maximum of one day per week in the classroom and conduct the remainder of the learning online, using an Internet-based communication platform such as WebCT or Xpress. Therefore, you get a blend of both worlds in a hybrid course.

Placement and Course Prerequisites

To promote student success in academic coursework, NICC places students in courses according to their ACCUPLACER, ACT, or other comparative test scores. As a result, some students are required to take prerequisite courses that help develop the necessary skills to succeed in college course work.

An advisor, instructor, or department dean may direct the Registrar's Office to drop a student from a course if the student has not met the prerequisite. The student will be notified as this action may impact his or her financial aid, tuition and program length. Questions regarding a course prerequisite should be directed to an advisor or the appropriate department dean.

Change of Academic Program

Students may request a change in academic program at any time, but changes may not become effective until the beginning of the next term. The Change of Academic Program form must be completed in the Student Services Office. Students should recognize that a change in academic program may affect length of their program and financial aid.

Grading System

NICC uses the four point grading system. Letter grades are assigned to represent levels of accomplishment: Credit for graduation is granted for the following grades: A, A-, B+, B, B-, C+, C, C-, D+, D, D-, L, P, and T. In programs that have a minimum C- policy for all courses, credit for a D grade is not given. Instructors have the option of assigning plus/minus grades,

	Grade	Grade Point
A	Excellent	4.00
A-		3.67
B+		3.33
B	Above Average	3.00
B-		2.67
C+		2.33
C	Average	2.00
C-		1.67
D+		1.33
D	Below Average	1.00
D-		0.67
F	Failure	None
I	Incomplete	
L	Credit for Life Experience	
N	Audit	
O	Grade Requital (New Start)	
P	Credit Earned/Pass	
Q	No Credit/No Pass	
R	Required/No Credit	
T	Credit by Examination	(Test Out)
W	Withdrew	
X	Course Repeated	

Grade and Cumulative Grade Point Average

The grade point average is determined in the following manner:

1. Allow four points for an A, three points for a B, two points for a C, one point for a D, and zero points for an F. Multiply the number of points equivalent to the letter grade received in each course by the number of credit hours 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. The quotient represents the grade point average for the quarter.

The cumulative grade point average is determined in the same manner as the grade point average except that all of the student's work at the NICC is used in the compilation.

Instructors will specify the grading standards used for each course which may include plus/minus grading. A "C-" grade satisfies minimum academic requirements for courses that currently fall under the minimum "C" policy. However, a minimum 2.0 cumulative grade point average is required for graduation.

Dean's List

Students who have completed nine or more credit hours and achieved a grade point average of 3.5 or better in any term are honored by being named to the Dean's List.

Grading Policies

Incomplete Grading Policy

A temporary grade of "I" (incomplete) may be given for work that is not completed when the student is passing at the time of request but special circumstances beyond the students' control prevent completion of the course. It is not used to give a failing student an opportunity to re-do unsatisfactory work or to allow more time to complete the work when the reasons for the delay have been within the student's control. In general, failing the final exam or project or not submitting coursework as a result of inadequate preparation or learning are not valid excuses.

To qualify for an "I" grade, the student will need to sign an Incomplete Contract agreement with the instructor which documents the reason for the "I", the requirements remaining for resolving it, and the date by which it must be completed, not to exceed midterm of the following term. The instructor then enters an "I" as the final grade and submits the Incomplete Contract Agreement to the registrar. If an "I" grade is not recorded as the final grade and the Incomplete Contract Agreement is not submitted, the department dean will assign a grade of "F" for that student.

If the student is not available at the end of the term to sign the Incomplete Contract Agreement because of ill health or other reasons, the instructor may assign an incomplete mark and submit the form without the student's signature. The Registrar's Office will mail a copy of the form to the student. The student has until the date designated on the contract or no later than midterm of the following semester to complete the remaining requirements. If the student has not contacted the instructor by the designated date to resolve the incomplete mark as set forth in the Incomplete Contract Agreement, the mark of "I" will automatically change to a grade of "F".

When a student completes the requirements specified on the Incomplete Contract Agreement, the instructor submits the appropriate grade on a Grade Change Form to the Registrar's Office. A final course grade, once submitted to the registrar, may not be changed to an incomplete (I) except to correct an error at the request of the instructor and with the approval of the instructor's department dean. The instructor should send a Grade Change Form reporting the change and an Incomplete Contract Agreement to the appropriate dean who will forward them to the registrar if the change is approved.

If a student completes an Incomplete Contract Agreement for a course that serves as a prerequisite for an advanced level course, they will not be allowed to enroll in the advanced course until the incomplete grade is resolved.

Noncredit (Audit) Policy

The audit option provides students the opportunity to attend a class as a non-credit participant, usually as a listener-observer. This alternative may have value for students who want an introduction to a subject outside their major field, a review or refresher in a subject, or for other purposes where credit and grade are not needed or would pose an unnecessary academic threat. Students will have the option of completing assignments and taking examinations.

Audit enrollment carries no credit or grade point value, and said status will be recorded on the student's transcript as an "N." No inference is made about the quality of a student's mastery of the course subject matter.

A 50 percent reduction in the standard tuition rate is available to students who elect noncredit (audit) status prior to the beginning of the term. Students wishing to change to noncredit (audit) status after the beginning of a term will pay full tuition and must make this change by three-fourths of the way through the course.

Caution is advised in the use of an audit as the course must be repeated for a letter grade if credit is desired at a later date. An audited course cannot be changed to a graded course once the term has started.

Refunds for audited courses will be subject to the standard college refund policy. The reduced audit rate will not apply to course fees, lab courses, on-the-job training courses, independent study, telecourses, or courses within health programs that have a clinical component.

Course Final Grade Appeal Process

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 NICC and the integrity of the certificates, diplomas, and degrees conferred that the professional judgments 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.

At any time, a student may seek the assistance of a college counselor regarding the procedure in appealing alleged capricious grades or the merits of a particular case. Capricious grading is limited to one or more of the following:

A. The assignment of a grade to a particular student on some basis other than performance.
B. The assignment of a grade to a particular student by more exacting or demanding standards than were applied to other students.
C. The assignment of a grade which represents a substantial departure from the instructor's standards announced during the first part of the term.

Grading concerns within the semester will be dealt with according to departmental guidelines. Student appeals for a grade change must be initiated within 45 days of the start of the next semester by contacting the instructor. After 45 days, a written appeal must be submitted to the appropriate departmental dean. In no event can a grade be appealed after six months. A copy of the Final Semester Grade Appeal Process may be obtained from the campus Provost's Office.

Repeating Courses

Students may wish to repeat a previously taken course. A student who wishes to repeat an NICC course to improve the grade will need to repeat the same course at NICC. Both courses will be shown on the permanent transcript. The original grade will be change to an "X". A student may not repeat the course and then choose the better of the two grades. Only the most recent course will be computed in the cumulative grade point average.

Withdrawal from the College

Students withdrawing from the college must complete a Withdrawal Form available in the Student Services Office. Students who depart the college without officially withdrawing before three-fourths of a course is completed may expect to receive failing grades.

Medical Withdrawals

Students can withdraw from a course or the college anytime within a term if they provide a documented medical excuse. The grade will be recorded as a "W" grade. Requests for a medical withdrawal must be made during the term in which the medical problem arose. Tuition refunds will follow the regular college refund policy.

Students Called to Active Duty

NICC provides reasonable options for enrolled National Guard/Reservist students called to active duty. Students will be required to meet with the campus registrar and submit a copy of their assignment orders or letters from their commanding officers (or other adequate notification). A copy of the full policy may be obtained from the campus Registrar's Office.

New Start Policy

The New Start Policy is intended for students who change to a new program of study after receiving unsatisfactory grades in a previous program at NICC. To be eligible for New Start consideration, these requirements must be met:

1. Students must not have been enrolled at NICC for three consecutive terms.
2. Students must be enrolled in a new program of study.
   a. Changing from Arts and Science to a technical program
   b. Changing from any technical program to Arts and Science program
   c. Changing from one technical program to another technical program
   d. Changing from one Arts and Science concentration to another Arts and Science concentration
3. Students must not have graduated from any program at NICC.
4. Students must currently be enrolled and have successfully completed 12 semester hours (that impact GPA) in the new academic program with a cumulative major GPA of 2.50 or better.

Students should begin the process by discussing their option to apply for a New Start with their counselor or advisor. If they determine they would like to proceed to petition for a New Start, they will need to request a "New Start Petition" through the Registrar's Office. Personal letters addressing the students' previous situations and discussing what has changed that will enable them to be more successful academically must be attached to the petition and returned to the college's counselor. If a student is granted a New Start, the following conditions will apply:

1. The New Start policy is a one-time-only option, and once granted, the New Start may not be rescinded.
2. A New Start may only be applied to academic terms completed prior to the student's extended absence.
3. All academic work taken prior to the student's enrollment in the new program will be removed from the student's GPA calculation and degree requirements.
4. Courses are not removed from the transcript by a New Start. If a New Start is approved, all courses in the approved term(s) will receive a grade symbol "O". The approved term(s) will be any courses taken during terms prior to the student enrolling in new program. Grades earned for the term(s) specified in the request will not be included in the calculation of the student's cumulative grade point average.
5. Students will not be able to use any course with a grade symbol of "O" to meet graduation requirements.
6. This is a NICC policy only. You will need to check with your transfer institution regarding cumulative GPA computation policies for incoming students. Please note that courses with an "O" grade may not be transferable to another institution.

Readmission

Students withdrawing in good standing are eligible for readmission. A new application for admission must be submitted to the Admissions Office if the student has not attended for one year. Readmission of suspended students is reviewed by the Dean or Associate Dean of Student Services.

Student Concerns/Grievances

Should a concern arise, every effort should be made to resolve the concern with the instructor of the course. A student who feels that the concern has not been resolved should contact the department dean.

Student Grievance Procedure

If you have a grievance because of a grade received, an academic-related problem, or a situation where you feel you have been unfairly treated, you may follow a step-by-step process which could involve instructors and/or college administrators. All attempts should be made to resolve the problem with the involved NICC employee. Copies of the written procedure are available from the campus Provost's Office.

Dishonesty and Cheating

Academic dishonesty will not be tolerated in any course at NICC. Plagiarism and other forms of cheating are examples of such dishonesty and will result in serious consequences.

Students are plagiarizing if they:

- use direct quotes without quotation marks and textual citation of the material;
- paraphrase without crediting the source;
- present another's ideas as their own without citing the source;
- submit material developed by someone else as their own (this includes purchasing or borrowing a paper or copying a disk);
- submit a paper or assignment for which so much help has been received that the writing is significantly different from their own.

Students are cheating if they:

- copy someone else's exam or homework;
- purposefully allow another student to copy their work or submit work they have written as their own;
- submit a paper or assignment for which so much help has been received that the writing is significantly different from his/her own;
- pass test answers to another student before, during, or after a test.

A copy of the disciplinary action and appeal process may be obtained from the campus Provost's Office.

Classroom Visits /Field Trips

Any student or visitor not in the immediate company of a faculty member wishing to enter a classroom while instruction is in process must contact the department dean for permission. If the department dean is not available, the student or visitor should contact the Student Services Office for further information.

Field trips are frequently scheduled in an effort to provide educational experiences unavailable in the program setting, and costs will be incurred by students receiving direct benefit. However, school-owned vehicles may be used when available.

Transcripts

A permanent academic record is prepared for every student registered at NICC. The record is maintained in the Registrar's Office and administered in accordance with the Family Education Rights and Privacy Act of 1974. Records are confidential and transcripts will be issued only upon written request by the student or former student. Phone, email, or faxed requests will be accepted only for transcripts issued to other educational institutions or to the student's home address. Transcripts given or mailed to the student are considered unofficial and will be stamped with "Issued to Student."

Transcripts will not be issued until all financial and other obligations with the college have been met. Transcripts from high schools and other colleges or universities that have been sent to NICC for student files cannot be copied.

Any requests for more than five transcripts at one time are subject to a $5.00 fee per transcript. Requests will be honored as quickly as possible in order of receipt. However, expect some delay during peak periods (i.e., registration and end of term).

Student Record Retention Policy

NICC retains the official academic record (transcript) of enrollment and credits earned in perpetuity after a student's last enrollment.

Students who believe an inaccuracy exists in their official academic record (transcript) must notify the Student Services Office within 45 days of the start of the next semester or following graduation. After 45 days, a written appeal must be submitted to the appropriate dean. The official academic transcript is regarded as the final record of academic accomplishment, and in no event can a grade be appealed after six months.

Policy on Student Names

The name on the student record should be the student's complete and legal name. In evaluating and processing all name change requests, NICC reserves the right to require adequate and appropriate documentation as warranted.

Graduation Requirements

The requirements for graduation at NICC are those specified in the college catalog at the time a student declares a major at the college. However, any student may elect to meet the requirements stated in any later catalog. Students who do not complete requirements for their major within four years will be subject to the current catalog or any preceding catalog within four years. Students not enrolled for two consecutive semesters or more will be subject to the current catalog requirements. Students changing or adding majors will be subject to the catalog in effect at the time of change.

Full requirements of the chosen major must be met; adjustments will be made in instances where requirements have changed and courses are no longer available. Students may consult an advisor with questions about how courses they have completed fulfill degree requirements or how courses they plan to take will apply to their degree requirements.

Students should be aware that course prerequisites and/or the need for developmental work in English, mathematics, or reading may extend the time necessary for completion of NICC degrees, diplomas, or certificates. Demonstrated computer literacy is a requirement for graduation.

Students are eligible to graduate when they have fulfilled these requirements:

1. Completed all of the program requirements.
2. Maintained a cumulative grade point average of 2.0 or better within that program.
3. Completed all required courses with a passing grade. (Certain programs require a minimum grade of C- in some or all courses.)
4. Paid all fees and other financial obligations to NICC.
5. Returned all library materials.
6. Filed a Graduation Application form by the posted deadline.

Application for Graduation

Students who plan to receive a degree, diploma, or certificate must file a Graduation Application form with the registrar by midterm of the semester in which they plan to complete their program. Summer graduates at the Calmar Campus should have their graduation applications submitted by midterm of the spring semester.

Final grade checks will be made after the end of the semester, and awards will be sent to all successful graduates by

first class mail to the address listed on the graduation application. If graduation requirements are not met, the student will be required to reapply for graduation.

It is the responsibility of the student to know and to observe the requirements of his/her curriculum and the rules governing academic work. Although the advisor will attempt to help the student make wise decisions, the final responsibility for meeting the requirements for graduation rests with the student.

Commencement

Commencement ceremonies are held for the Calmar Campus in December and May. Peosta campus commencements are held in December, May, and August. Participation in commencement is voluntary for students who have filed a Graduation Application form with the Registrar. Participation does not guarantee that the student will officially graduate. Students eligible for participation in commencement are those within eight credit hours of earning their degree or who are registered in their last term of a program sequence. Students who are more than eight credit hours away from completion of their program or who are not in the last term of a program sequence must petition the Registrar's Office for permission to participate in commencement. Students who wish to have their names listed in the commencement program must submit their graduation application by the posted deadline.

Transfer of Credits

Transfer of Credits to NICC

The college accepts credits from other accredited colleges and universities in which a minimum grade of C- has been earned. Courses which correspond to an equivalent course at NICC are transferred at face value and may be used to fulfill program requirements. Transcripts will be evaluated for the student's current academic program requirements. If a student changes his/her program, an evaluation will need to be completed for the new program. When a question exists as to the equivalency of a course, it is the student's responsibility to provide a course description or syllabus. Students desiring to transfer credit to NICC need to provide the Admissions Office with an official transcript. Courses completed over five years ago may be transferred at the discretion of the academic dean. There is no charge for credit granted through transfer. Grades in courses transferred to NICC are not computed in the GPA.

Transfer of NICC Credit to Other Colleges and Universities

Students considering transfer to another college or university should contact that institution's registrar early in his/her course of study at NICC. Transferability of credit earned in any course at NICC is determined by the college to which the student is transferring.

Transfer preparation should include the following:

1. Decide on a major field of study**.** For assistance, contact Employment and Career Services, an academic advisor, NICC counselor, dean, or faculty member.
2. Identify colleges that offer your major field, study their catalogs, log onto their Websites, and visit with their college representatives (some college representatives visit NICC campuses throughout the year). Discuss transferability of courses and programs from NICC.
3. Narrow your choice to three or four colleges and visit their campuses. If you have not already done so, visit with their admissions personnel and major department deans. If possible, a written document setting a plan of study should be secured.
4. Work with your NICC advisor to select the coursework needed to meet the institution's requirements.
5. Changes in your educational plans should be discussed with your NICC advisor.
6. If you have CLEP or Military credits you wish to transfer, you will need to review those credits with the college or university to which you are transferring.
7. Scholarships specifically for transfer students may be available at the college or university to which you are transferring. Check with the Financial Aid Office at NICC and the transfer institution for additional information.

The Family Education Rights and Privacy Act (FERPA)

The Family Education Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights belong to any student who is or has been in attendance at Northeast Iowa Community College. Attendance is defined as physically attending and/or participating in any NICC course. These rights include:

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 written requests to the registrar that identify the record(s) they wish to inspect. The registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the registrar, the registrar will 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 registrar, 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/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.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA.

The college also advises students that:

1. The college may deny access to the following classes of records: financial information submitted by parents; confidential letters or recommendations to which the student has waived rights of inspection; private records of instructors, counselors, or administrators kept in their own use; alumni records which contain only directory information and information collected after the student has left the college; and medical, psychiatric, psychological, or similar records.

2. The college may disclose educational records without consent of students to the following:

    - personnel within the college who maintain educational records and those with a legitimate educational interest, including faculty or staff who deal with the student and carry out education studies and employees designated by them to assist in these tasks. NICC defines "legitimate educational interest" as "needs the record(s) to carry out employment responsibilities". Therefore, any college employee or person acting on behalf of the college may have access to student records without the student's written consent if that person needs the access to carry out his/her employment responsibilities;
    - officials of other colleges or universities in which the student seeks to enroll, with a notice of the disclosure being sent to the student's last known address;
    - organizations conducting studies approved by the college having educational value or concerning financial aid;
    - accrediting organizations approved by the college carrying out their accrediting functions;
    - persons in compliance with a judicial order or a lawfully issued subpoena within a reasonable period of time after the notice of the disclosure has been sent to the last known address of the student, unless the terms of the subpoena forbid advance notification;
    - persons in an emergency if, in the judgment of an official in charge of the records, knowledge of the information is necessary to protect the health or safety of the student or other person.

3. The college may disclose, without the written consent of the student, "directory" type information unless the student specifies to the contrary as described below. Directory information includes: student name,

address, personal email address, phone number, photograph, date and place of birth, major field of study, dates of attendance, grade level, enrollment status (e.g. full-time or part-time, number of credits), participation in officially recognized activities and sports with height and/or weight of team members, current membership in clubs, degrees, honors and awards received, academic honor roll, high school and other colleges attended, and the most recent educational agency or institution attended.

4. Students may refuse disclosure of one or more categories of directory information by filling out the appropriate form in the Registrar's Office within ten calendar days of the beginning of the term in which enrollment occurs**.** If the Order to Prevent Disclosure of Directory Information is filled out any time after this ten-day period, the college cannot guarantee that information was not released prior to the non-disclosure request. Students may either choose individual categories or have everything withheld. The request for withholding will remain in effect until the student rescinds it in writing.

5. When personally identifiable information other than directory information is released, a notice will be given that the recipients are not permitted to disclose the information to unauthorized persons without written consent of the student. College personnel will be informed annually of this restriction and their responsibilities under this Act so that individual notices will not be required.

FERPA rights cease upon death. However, it is the policy of Northeast Iowa Community College that no records of deceased students be released for a period of 25 years after the date of death unless specifically authorized by the executor of the estate of the deceased or by the next of kin.

Student **Services** & **Resources**

New Student Orientation
Academic Advising
Learning/Writing Center Services
Library Services
Disability Services
Adult Transition Center
Counseling
Accuplacer Placement Testing
Employment and Career Services
TRiO Services
GED Testing
Student Identification Cards
Bookstore
Cafeteria Services
Child Care Services
Housing
Parking
Regional Transit Authority (RTA)
Student Health/Insurance

student driven...community focused

2008-2009

Student Services

The staff of Northeast Iowa Community College takes pride in the quality and variety of services available to assist students in reaching their academic and personal goals. Student Services staff work closely with faculty and administration to determine the needs of each individual in order to optimize student success. Most services are provided at no cost to the student and are readily accessible to all. Student Services policies, forms, and general information can be accessed in the Student Services Offices or on the college Website.

New Student Orientation

Students are encouraged to attend one of the half-day orientation sessions held on campus prior to the start of each fall and spring semester. Orientation will provide students with information on support services NICC has to offer as well as tips to help them succeed in college. Services and resources highlighted at orientation include advising, business office, career services, classroom expectations, computer and email access, financial aid, learning center, library, study skills, and student activities and organizations. For specific details and dates on orientation, contact the Student Services Office at each campus.

Academic Advising

Students are assigned an academic advisor who will interpret assessment testing, discuss academic goals, assist with registration, and identify and resolve academic difficulties. Students may request a different advisor assignment by completing a form in the Student Services Office. The final decision on course selection and registration is the student's responsibility.

Learning/Writing Center Services

Individual and group instruction for students needing assistance with coursework is available through the Learning Centers at no cost. The Centers help students improve in reading, writing, math, science, vocabulary, study skills, and other subjects.

The Learning Centers are located at the Calmar campus in the Wilder Learning Resource Center, at the Peosta campus in room 248, and in Dubuque at 700 Main Street. For more information regarding Learning/Writing Center services and hours call: 800-728-2756, ext. 394/411 (Calmar campus), 800-728-7367, ext. 226 (Peosta campus), or 563-557-8353, ext. 132 (Dubuque Center).

Library Services

Each NICC campus has a library; Burton Payne in Peosta and Wilder in Calmar. Library staff collect and organize information to support all programs of the college and leisure activities. Library staff will help you identify, locate, evaluate and use information resources. Visit the library webpage at www.nicc.edu/services/academic/library/index.html to determine what resources are available in the library or electronically via the Internet, to request materials through interlibrary loan, or to contact library staff.

Disability Services

Students with disabilities are encouraged to contact the Coordinator of Developmental Education for assistance. Interpreters, note takers, texts on tape, as well as adaptive equipment, are available through the Disability Services Offices. The college will work with state and private agencies to provide accommodations and services. All student needs or requests are dealt with in a timely and confidential manner.

For more information regarding disability services for students, call 800-728-2256, ext. 258 (Calmar Campus) or 800-728-7367, ext. 280 (Peosta Campus).

Adult Transition Center

The Adult Transition Center serves the unique needs of non-traditional students, striving to create an atmosphere of welcome and encouragement for all. Students who may be considered non-traditional are those who did not attend college immediately after high school, those who are parents while in school, and those who started college but did not complete their degree, just to name a few.

Services include back-to-school workshops, career assessments (including the KUDER), admission assistance, placement testing, intake advising and course registration, assistance filing financial aid applications, textbook loans, tool loans, job search assistance, career exploration and labor market information, personal growth activities, informal counseling, and referral to community-based agencies.

For more information about the Adult Transition Centers, call 800-728-2256, ext. 304 (Calmar Campus) or 800-728-7367, ext. 104 (Dubuque Center).

Counseling

NICC provides short term or what is called "brief" counseling to students. A student can make an initial appointment with the counseling center. During this initial appointment, the counselor will assess the student's needs and decide if follow-up visits should be scheduled in the counseling center or if the student may need to be referred to an outside agency. The counseling appointments at the college are solution oriented and time limited. For assistance, please contact the counselor in Student Services, call 800.728.2256, ext. 263 (Calmar Campus) or 800.728.7367, ext. 215 (Peosta Campus).

ACCUPLACER Placement Testing

ACCUPLACER is a placement test in math, reading comprehension, and writing skills for incoming NICC students. It is "computer-adaptive" which means questions are chosen based on your answers to previous questions - the more correct answers you choose, the more difficult the questions become, allowing for a more accurate assessment. Also, because ACCUPLACER is administered over the Internet, testing is more convenient and scoring is virtually immediate. After the test, an advisor will help you interpret your scores and recommend placement into NICC courses.

NICC's Learning Centers have study packets available in each of the content areas. Stop by, pick one up, and then review it with faculty in the Learning Centers. Below are recommended Websites to prepare you for taking the ACCUPLACER test. You can find additional resources by going to GOOGLE.com and entering the words ACCUPLACER Practice.

www.collegeboard.com/student/testing/accuplacer/preparation-sample.html
http://www.aims.edu/student/assessment
(under Tests & Information click ACCUPLACER)
http://montgomerycollege.org/Departments/studev/math.htm
http://www.aaamath.com
http://www.testprepreview.com
http://www.uiowa.edu/~examserv/mathmatters/

For additional information regarding the ACCUPLACER test, contact the Assessment Technician: 800-728-2256 ext. 311 (Calmar campus); 800-728-7367 ext. 226 (Peosta campus).

Employment and Career Services

Employment and Career Services offers career planning and job search assistance to students before and after graduation. Individuals who are uncertain about their career path can speak with career services about career options and NICC courses and programs. Employment and Career Services can also discuss experiential learning and informational interviewing, and internships to aid in career exploration and job placement. Individual and group

seminars are provided to assist students with resumes, cover letters, interviewing, and other job-seeking skills. Job openings/internships are received from a variety of sources including local and regional employers, Websites, Iowa Workforce Development, and faculty.

Students have the opportunity to meet with employers and transfer colleges/universities who visit campus and set up informational booths or give presentations. Students can also meet with employers through on-campus interviewing and local career fairs. Additional resources available through Employment and Career Services can be accessed at www.nicc.edu/careerservices.

Career Assessment

Employment and Career Services actively assists students and the general public in career decision- making. Career assessments can be accessed online at www.nicc.edu/careerassessments. Assessments offered include:

NICC Career Passport (KUDER Assessment): Designed to help individuals discover their career interests, skills, and work values. NICC has licensed this assessment with Kuder for use in area grade schools, high schools, and NICC. Kuder is free of charge. Contact Employment and Career Services for more information and access codes.

CDMS (Career Decision-Making System): This paper/pencil interest inventory is available through the Adult Transition Center at no cost. http://www.nicc.edu/services/academic/adult/

Career Connection

The Career Connection forms a partnership between NICC and Region 1 Iowa Workforce Development. Career outreach coordinators provide career outreach services which benefit district middle schools, high schools, and the community by creating and enhancing career development programs. Career Connection works with Employment and Career Services to assist students with career planning, internships, and job search activities.

TRiO Services

TRiO – Student Support Services (Peosta Campus Only)

TRiO – Student Support Services, a federally-funded program on the Peosta Campus, provides free support services such as tutoring, advising, university transfer assistance, success workshops, educational equipment and cultural activities to 160 eligible students. To be eligible for TRIO-SSS at NICC-Peosta, the student must be enrolled full-time in a two-year program with plans to transfer, and meet one or more of the following criteria:

- Neither parent has a four-year degree.
- Meets federal income guidelines
- Have a documented learning or physical disability.

TRiO-SSS staff has the unique opportunity to work individually with students and to get to know each student on a first-name basis. Participants receive holistic support all the way through graduation from NICC to transfer to a four-year university. The office is open year-round. For more information, stop by Room 142 or email benedictc@portal.nicc.edu or call the TRIO-SSS Office in Peosta at 800.728.7367, ext. 408.

TRiO – Upward Bound

TRIO – Upward Bound, a federally funded program at NICC, assists area high school students prepare for college. Upward Bound provides free services such as tutoring, mentoring, academic advising, ACT preparation, academic instruction in reading, math, science, and social studies, and assistance in applying for college and financial aid. Upward

Bound participants also receive opportunities to participate in cultural field trips and a six-week summer program. To be eligible for TRIO–Upward Bound, the student must meet one or more of the following criteria:

- Neither parent has a four-year degree.
- Meets federal income guidelines.

For more information about TRIO–Upward Bound, call 800-728-2256, ext. 440 (Calmar campus) or 800-728-7367, ext. 327 (Peosta campus).

GED Testing

The General Education Development (GED) program enables those who have not completed high school to obtain a high school equivalency diploma from the State of Iowa. The diploma certifies that a level of educational development comparable to that of a high school graduate has been achieved. The GED tests are available in English, Spanish, large print, and on audio cassette tapes. Accommodations are available for individuals with a documented disability.

Student Identification Cards

All students who enroll in NICC programs and fulfill fee requirements must secure an identification card. Identification cards are issued during the first three weeks of each semester, or by appointment, in the Student Life office. Students must obtain an identification card each academic year, and a semester sticker is required at the Peosta campus for each term. Identification cards are required in some clinical situations, for make-up testing, to check out library materials, and to obtain academic and/or financial aid information from the Student Services Offices. In the event that an identification card is lost, stolen or destroyed, a duplicate card can be purchased in the Student Life Office.

NICC student identification cards will also allow students free access to the Peosta Community Centre. Discounted student memberships are available at local fitness centers in the Calmar area. The card also can be used by students to secure discounts at participating area businesses. Please contact the Student Life Office for more information on memberships and discounts.

Bookstore

Textbooks, materials, supplies, clothing, and other personal items may be purchased at the Bookstore on each campus. Textbooks may also be purchased online at www.nicc.edu.

Cafeteria Services

Cafeteria services provided for the convenience of students include breakfast, lunch, and snacks. Cafeteria services are available on the Calmar and Peosta campus.

Child Care Services

Children between the ages of six weeks and seven years may enroll in the NICC Child Development Center on a first-come, first-serve basis. Enrollment is open to children of NICC students, staff, faculty, and members of the surrounding communities. Enrollment is granted without discrimination in regard to sex, race, creed, national origin, or political beliefs. The centers are designed to provide low-cost, convenient, on-campus care of children. Forms to apply for child care services are available from the Child Development Centers on the Calmar and Peosta campus.

Housing

The college compiles a list of available housing in various communities within proximity of each campus. Housing costs vary depending upon the services provided. Housing information may be obtained from the Admissions Office.

Parking

NICC provides free parking for students on both main campuses. Please park only in designated areas. Appropriate information regarding parking permits and/or vehicle registration will be given to you. A limited number of handicapped permit parking spaces are available for students with disabilities. NICC has adopted parking and traffic regulations in order to maximize safety and ensure access for emergency vehicles. Free parking is not provided at the Dubuque Center.

At the Calmar Campus, vehicles must have a valid parking permit properly displayed, which is available free of charge at the Calmar Campus Bookstore. At the Calmar Campus, students are asked to park only in designated areas. The owner is responsible for lost permits. There is no designated or reserved parking at the Peosta Campus. For both campuses, drivers are responsible for finding a legal parking space. Vehicles parked in unauthorized space will be ticketed and subject to fines. Transcripts and grades will not be released until all fines are paid.

Regional Transit Authority (RTA)

There is a Regional Transit Authority (RTA) bus route between the Peosta Campus and the down-town Dubuque Centers Monday through Friday. Schedules and fare information are posted at both sites.

Student Health/Insurance

A referral will be made to a local medical facility should an emergency arise when it is necessary for an administrator or faculty member of the NICC to refer a student for medical services. However, if a student has another choice for medical services of an emergency nature, this request will be honored. The student and/or parents will be liable for the payment for such service.

Students are encouraged to enroll in a student health/insurance program to assure protection in the event of illness or injury if they are not covered under a current plan. Health insurance brochures from a variety of companies providing no-cost or low-cost individual or family coverage are available in the Financial Aid Office.

Student **Rights** & **Responsibilities**

General Student Conduct
Administrative Probation/Withdrawal

student driven...community focused

2008-2009

Student Rights and Responsibilities

General Student Conduct

Students are expected to conduct themselves in a responsible and courteous manner. By enrolling at the college, students consent to abide by the college's policies, regulations, and operational procedures. Students are expected to comply with federal, state, and local laws and regulations. A student whose behavior is disruptive to classes, infringes on the rights of others, damages the property of the college or others, or is disruptive to the operation of the college may be subject to discipline that may include, but not be limited to, academic probation, suspension, or expulsion.

NICC retains the authority to withdraw immediately a student from an on-the-job training site, a clinical area, an observation, or student organizations when a student's grades, work, conduct, or health may have a detrimental effect on the student, the college, other students, faculty or staff, customers, clients, or patients of the cooperating agency.

Students should conduct themselves in a manner consistent with NICC's educational mission and policies. The following is a non-exclusive list of conduct that may result in disciplinary action, which will vary depending on the specific facts of each situation:

- Forgery, alteration or misuse of college documents, records, or identification.
- Knowingly furnishing false information to the college.
- Obstruction or disruption of college operations.
- Obstruction or disruption of college-authorized activities on property owned or supervised by the college.
- Physical or verbal abuse of any person on property owned by the college or at functions sponsored or supervised by the college.
- Conduct that threatens or endangers the health or safety of any person, including oneself, on property owned by the college or at functions sponsored or supervised by the college.
- Theft of or damage to college property or property of a member of the college community or campus visitor.
- Unauthorized entry to college facilities or property.
- Unauthorized use or misuse of college property, including attempting to leave the library with materials which have not been properly borrowed, or misuse of college telephones.
- Violation of, or repeated violations of, college regulations or campus policies.
- The possession, use, manufacture, or distribution of illegal drugs, alcohol, or other controlled substances (except as expressly permitted by law) on property owned by the college, or at functions sponsored or supervised by the college.
- Lewd, indecent, or obscene speech or conduct on property owned by the college or at functions sponsored or supervised by the college.
- Intimidating behavior directed toward any student, faculty member, staff member, or administrator.
- Failure to comply with the directions of a college official acting in the performance of his/her duties.

- Possession or use of firearms, other dangerous weapons, explosives or fireworks on property owned by the college or at functions sponsored or supervised by the college.
- Knowingly circulating a false report or false warning that property under college control or supervision may be subject to a bombing, fire, crime, emergency, or other catastrophe.
- Smoking in college buildings.
- Failure to report to the campus appropriate dean or local sheriff and/or police agencies knowledge of criminal activity on campus, i.e. murder, rape, robbery, aggravated assault, burglary, or motor vehicle theft. Such a report shall be provided in a manner that is timely and that will aid in the prevention of similar occurrences.
- Misconduct pertaining to the college's computer resources such as intentional disruption of access of other students, faculty, or staff to college computer resources. Any unauthorized access or attempted access to computer resources. Using college computer equipment to interfere with the rights of others including, but not limited to: falsifying or altering records, creating false records, damaging programs belonging to the college and/or others, and accessing confidential information of others.
- Activities, including hazing, which imperil the physical well-being of any student; are by nature indecent, degrading, or morally offensive; or reasonably can be assumed to have a degrading effect on the mental or moral attitude of persons involved.
- Illegal gambling.
- Engaging in behavior that is discriminatory, including, but not limited to, harassment of students, staff and others based on, but not limited to, sex, age, race, religion, national origin, color, creed, or disability. Examples of discriminatory behavior may include, but not be limited to, name calling, taunting, undesired statements regarding the person, graffiti, or other outward actions that are interpreted as discriminating to others.

A copy of the policy that provides for the due process of individual students may be obtained from the campus Provost's Office.

Administrative Probation/Withdrawal

A student may be placed on probation for a specified period of time (usually one term) when a student commits an infraction of the General Student Conduct Policy which warrants probation.

Students will be offered counseling services to determine the cause of probation and to develop a plan that will allow the student to remove probationary status.

A student may be suspended from the college immediately without prior probation for an infraction of the General Student Conduct Policy. A student may appeal a suspension decision.

A student who has been suspended may apply for readmission after consulting with the appropriate dean or counselor.

A suspended student may be eligible for selected services from the college such as developmental studies, remedial work, Learning Center, and counseling.

A student may be expelled for serious infractions by the College Board of Trustees. Readmission to the college after expulsion is a Board decision.

Student **Life, Leadership** & **Diversity**

Life @ NICC
Diversity
Student Senate
Campus Clubs and Organizations
Student Newspaper

student driven...community focused

2008-2009

Student Life

College is more than books and tests. It is an experience. We believe your NICC experience can be the **Experience of a Lifetime**! But, as they say – "Life is what you make it," so explore your interests, make new friends, and make a difference by getting involved!

Life @ NICC

Flag football	Basketball	Rock the Vote	BBQ's
Volleyball	Softball	Family Activities	Hypnotist
Bowling	Theater Trips	Musical Entertainment	Golf
Disc Golf	Dodgeball	Service Opportunities	Canoeing
BINGO			

The Peosta Community Centre offers a free memberships to all NICC students (Must have current student ID). Discounted memberships are available at local fitness centers in the Calmar area. Information is available in the Calmar Student Life Office.

Diversity

We believe that Diversity begins with respect for all human life, no matter the differences. We believe it is our responsibility to respect others. We believe that serving others develops an understanding and appreciation of human differences and commonalities.

Student Senate

The NICC Student Senate is a unique and rewarding opportunity to develop leadership skills and make a difference. Through the Student Senate, you can have a hand in shaping the day-to-day life of the student body and make critical decisions regarding the use of student fees.

Student Senate is a commitment worth investing your time in! There are new friends to make, activities to plan, a statewide leadership conference to attend, and many other leadership opportunities. Student senate meetings are held twice a month, giving everyone the opportunity to give their input. Officers are elected, but the Student Senate is open to anyone willing to commit to the opportunity.

Campus Clubs and Organizations

Student clubs and organizations at the College are organized to enhance social, cultural, and educational experiences of its members. Some of the organizations in which students may participate while attending NICC are:

- Arboriculture League
- Alpha Beta Gamma National Business Honor Society
- American Association of Respiratory Care and Iowa Society for Respiratory Care
- American Dental Assistants Assoc.
- American Health Information Management Association
- American Society for Radiologic Technologists
- Business Professionals of America
- Cosmetology Club
- Destination Club
- Dubuque District Dental Assistants Society
- Dubuque District Society of Radiological Technologists
- Gay Straight Alliance
- Health Occupation Students of America
- Iowa Association for the Education of Young Children
- Iowa Dental Assistants Association
- Iowa Society of Radiologic Technologists
- National Student Nurses Association
- NCC Association for Nursing Students
- Northwestern Press
- Phi Theta Kappa National Honor Society
- Rodeo Club
- Skills US

Student Newspaper

The Northeastern Press is the official student newspaper of NICC. It provides an open forum for NICC students and the NICC campus community. The Northeastern Press is published monthly between September and May and is also available electronically through the NICC website. An electronic newspaper club is housed in the NICC communication portal known as Xpress. This portal allows student newspaper staff to communicate with each other, submit articles, participate in the publication process, access message boards and story ideas, and build journalistic style and skills. Students interested in participating should e-mail the Northeastern Press at northeasternpress@nicc.edu.

NORTHEAST IOWA COMMUNITY COLLEGE

APPLICATION FOR ADMISSION

Calmar Campus | Peosta Campus
Chickasaw County Center
Cresco Center
Delaware County Center
Dubuque Center
Oelwein Center
Town Clock Center
Waukon Center

Social Security No. ___ — ___ — ____ ☐ Male ☐ Female Date of Birth ___ — ___ — ____

Complete Legal Name Last _____ First _____ Middle Initial

Preferred First Name (if different from above) _____ **Former Legal Last Name** _____

Mailing Address Number & Street _____ P.O. Box _____

City/Town _____ State or Country _____

Zip Code _____ County _____

Home Phone Number ___ — ___ — ____ Work/Cell Phone Number ___ — ___ — ____

Email Address _____

Emergency Contact Name _____ **Emergency Contact Phone** ___ — ___ — ____

What is your ethnic/racial background? [optional]
☐ American Indian/Alaskan Native ☐ Asian America/Pacific Island
☐ Black, not Hispanic ☐ White, not Hispanic
☐ Hispanic ☐ Other

Although your response is optional, providing this information will assist us with planning and with meeting the needs of our students. This data will only be used to comply with regulations established by the U.S. Department of Education.

Educational Objectives: (Please check the one that best describes your current goals at NICC.)
☐ Transfer to another college/university [A] ☐ Improve basic skills/self-improvement [F]
☐ Prepare to enter the job market [B] ☐ Prepare to change careers [G]
☐ Improve skills for present job [C] ☐ Meet certification/licensure requirement [H]
☐ Explore courses to decide on a career [D] ☐ Undecided [I]
☐ Take courses for personal interest [E]

Have you ever applied or enrolled in credit classes at NICC? ☐ Yes ☐ No

I plan to attend: ☐ Calmar Campus ☐ Peosta Campus

I am applying for the term beginning:
☐ Fall (August) 20____
☐ Winterim (December) 20____
☐ Spring (January) 20____
☐ Summer (May) 20____

Program: (Choose one from attached list.)_____

Are you a citizen of the U.S.? ☐ Yes ☐ No
Non-U.S. citizens, state your current visa status_____
Country of origin_____
What is your native language? ☐ English ☐ _____
Are you an Iowa resident? ☐ Yes ☐ No

Do either of your parents hold a bachelor's degree? ☐ Yes ☐ No
Will you be applying for financial aid? ☐ Yes ☐ No
Would you like career planning assistance? ☐ Yes ☐ No

Are you:
☐ currently in high school ☐ a high school graduate ☐ a (GED) graduate ☐ other

Highest degree earned after high school: ☐ Less than two-year degree ☐ Two-year degree ☐ Four-year degree ☐ Graduate degree ☐ N/A

Enter the name of the high school or GED testing center where you graduated (or will be graduating). Non-graduates list last high school attended.

Name of High School	**City and State**	**Dates Attended**	**Date of Graduation** (if applicable)

List all colleges you have attended or are now attending. Transfer students must submit official transcripts if credit is desired. Students expecting to receive VA educational benefits must submit official transcripts from all previous college institutions attended.

Name of each institution attended since high school including NICC	**City and State**	**Degree(s)**

Signature _____ **Today's Date** _____

Thank you for your application. Once the Admissions Office receives your application, you will be notified which items are needed to complete your admission process. Applicants are accepted into their program once the entire admissions process is completed.

CALMAR CAMPUS PROGRAMS

Associate in Arts
Associate in Arts–General
Business Administration
Communication
Community & Regional Planning
Criminal Justice
Early Childhood
Education
Human Services
Law Enforcement

Associate in Science
Associate in Science–General
Agriculture
Animal Science
Companion Animal Science
Dairy Science
Industrial Technology
  Teacher Education
Pre-Veterinary Medicine

Associate in Applied Science
Accounting Specialist
Administrative Assistant
Agriculture Business
Agriculture Production
Arboriculture
Associate Degree Nursing
Automotive Technology
Business Specialist
Computer Technology
Construction Technology
Cosmetology
Dairy Science Technology
Electroneurodiagnostic Technology
Entrepreneurial Cosmetology
EMT–Paramedic
Enology Specialist
Firefighting Specialist
Health Information Technology
Human Services Generalist
Industrial Electrician
John Deere Ag Technology
Marketing Management
Massage Therapy Specialist
Medical Laboratory Technician
Viticulture Technology

Diplomas
Accounting Clerk
Building Materials Management
Carpentry
Coding Specialist
Commercial/Residential Electrician
Computer Applications Technician
Cosmetology
Early Childhood
Enology Specialist
Human Services Technician
Marketing
Medical Transcriptionist
Office Technology*
  General
  Medical
Practical Nursing
Professional Massage Therapy
Viticulture Technology

Certificates
Agriculture Business*
  GIS/GPS
  Manager & Marketing
  Ag Office Technician
Agriculture Production*
  Agronomy
  Animal Science
  Dairy
Carpentry
  Cabinet Making
  Finishing Skills
  Foundation Skills
  Floor & Framing Skills
Dairy Schience Technology
  Dairy Breeding Specialist
  Dairy Feeding Specialist
  Dairy Health Specialist
EMT–Basic
Enology
Nail Technology
Paraeducator
Viticulture
Web Design Technician

PEOSTA CAMPUS PROGRAMS

Associate in Arts
Associate in Arts–General
Business Administration
Communication
Community & Regional Planning
Criminal Justice
Early Childhood
Education
Entrepreneurial Studies
Human Services
Law Enforcement
Legal Assistant/Paralegal
Management Info Systems

Associate in Science
Associate in Science–General
Agriculture

Associate in Applied Science
Accounting Specialist
Administrative Assistant
Associate Degree Nursing
Business Specialist
Computer Analyst*
  Business & Web Programming
  Network Admin & Tech Support
Construction Technology
Electroneurodiagnostic Technology
Electronic Technology
EMT–Paramedic
Enology Specialist
Gas Utility Construction & Service
Graphic Design
Health Information Technology
Human Services Generalist
Marketing Management
Medical Laboratory Technician
Radiologic Technology
Respiratory Care
Surgical Technology
Viticulture Technology

Diplomas
Accounting Clerk
Automotive Mechanics
Carpentry
Coding Specialist
Dental Assisting
Desktop Publishing Specialist
Diesel Mechanics
Early Childhood
Enology Specialist
Heating and Air Conditioning
Human Services Technician
Marketing
Medical Transcriptionist
Office Technology*
  Medical
  Secretarial
  Legal
Practical Nursing
Surgical Technology
Viticulture Technology
Welding

Certificates
CAD Specialist
Carpentry
  Cabinetmaking
  Finishing Skills
  Foundation Skills
  Floor & Framing Skills
EMT–Basic
Enology
Entrepreneurial Studies
Paraeducator
Tourism
Viticulture

***Please choose one option from those listed below program.**

ATTENTION HEALTH STUDENTS:
Any person enrolled in any health care program with a clinical component may be exposed to environmental hazards and infectious diseases, including, but not limited to: tuberculosis, hepatitis B, hepatitis C, and HIV.

the following are basic steps for admission to nicc

1. SUBMIT A COMPLETED APPLICATION FOR ADMISSION
Be sure to submit your application to the campus you plan to attend (Calmar or Peosta). There is no application fee. You may also apply for admission online at **www.nicc.edu**.

2. COMPLETE ONE OF THE FOLLOWING PRE-ADMISSION REQUIREMENTS :

☐ **SUBMIT ACT SCORES:** If you have taken the ACT, your scores should appear on your high school transcript. Please have your high school guidance office send a copy of your transcript to the NICC campus you plan to attend. NICC will evaluate the English, reading, and math sub scores to determine if they meet our admission requirements. Upon evaluation, you may be asked to take the NICC Pre-Admission Assessment.

☐ **COMPLETE THE NICC PRE-ADMISSION ASSESSMENT:** This assessment test is offered free of charge through the NICC Assessment Center and evaluates a student's abilities in writing, reading, and math. This assessment will also be used as a guideline for course placement. Please contact the Assessment Center at the campus you plan to attend to schedule an appointment.

NOTE: Students requiring special testing accommodations (i.e. untimed tests, having tests read to you, etc.) MUST contact the Coordinator of Developmental Education prior to testing:
Calmar Campus – 800.728.2256 or 563.562.3263 x.258
Peosta Campus – 800.728.7367 or 563.556.5110 x.280

☐ **SUBMIT COLLEGE TRANSCRIPTS:** Students with prior college credit in a college-level math, reading, or English course (with a passing grade of C- or better) are usually not required to take the Pre-Admission Assessment. Please have your official college transcripts sent to the Admissions Office of the NICC campus you plan to attend.

NOTE: Program admission requirements may vary. You will be notified if any additional documents or assessment are required.

FINANCIAL AID

All students are encouraged to complete a Free Application for Federal Student Aid (FAFSA) form to apply for all types of financial assistance.

There are four types of financial assistance available:

1. **Grants:** Free money awarded based on the results of your FAFSA
2. **Scholarships:** Free money based on completion of a separate NICC Foundation Scholarship Application
3. **Work-Study:** On-campus employment funded by financial aid
4. **Loans:** Qualifying students enrolled at least half-time may apply for loans while attending college. This is money that must be repaid after graduation

Certain programs are not eligible for financial aid. For more information, please contact the financial aid office at the campus you wish to attend: Calmar at 563.562.3263 x.376 or Peosta at 563.556.5110 x.401. Additional information is also available on our website at **www.nicc.edu**.

CALMAR CAMPUS
Admissions Office
P.O. Box 400
Calmar, Iowa 52132-0400
PHONE 563.562.3263
TOLL FREE 800.728.2256 x.376
FACSIMILE 563.562.4369

PEOSTA CAMPUS
Admissions Office
10250 Sundown Road
Peosta, Iowa 52068-9703
PHONE 563.556.5110
TOLL FREE 800.728.7367 x.401
FACSIMILE 563.557.0347